



# **Advance Planning Briefing For Industry**

***“Sustaining the  
Warfighter  
through  
Battlespace  
Integration”***

**MAY 13-14, 1998**

**UNITED STATES ARMY  
COMMUNICATIONS-ELECTRONICS COMMAND**

19980615 003

**DISTRIBUTION STATEMENT A**

**Approved for public release;  
Distribution Unlimited**

# **NOTICE**

**This publication contains the briefings presented during this Advance Planning Briefing for Industry (APBI). Following the APBI, you may obtain a Proceedings Book for a minimal fee by contacting the Defense Technical Information Center (DTIC). The telephone number is: (800) 225-3842.**

**We hope that the above publication proves beneficial to your long-range planning efforts. If you have any additional questions and/or suggestions, please contact the Program Analysis and Evaluation Directorate, AMSEL-PE-OD, ATTN: Denise Ellison, (732) 532-8674.**

**PLEASE CHECK THE APPROPRIATE BLOCK BELOW:**

Q#498-08 1876

☐ \_\_\_\_\_ copies are being forwarded. Indicate whether Statement A, B, C, D, E, F, or X applies

☒ DISTRIBUTION STATEMENT A:  
APPROVED FOR PUBLIC RELEASE. DISTRIBUTION IS UNLIMITED

☐ DISTRIBUTION STATEMENT B:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES  
ONLY: (Indicate Reason and Date). OTHER REQUESTS FOR THIS  
DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office).

☐ DISTRIBUTION STATEMENT C:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND  
THEIR CONTRACTORS: (Indicate Reason and Date). OTHER REQUESTS  
FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office).

☐ DISTRIBUTION STATEMENT D:  
DISTRIBUTION AUTHORIZED TO DoD AND U.S. DoD CONTRACTORS  
ONLY: (Indicate Reason and Date). OTHER REQUESTS SHALL BE REFERRED TO  
(Indicate Controlling DoD Office).

☐ DISTRIBUTION STATEMENT E:  
DISTRIBUTION AUTHORIZED TO DoD COMPONENTS ONLY: (Indicate  
Reason and Date). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office).

☐ DISTRIBUTION STATEMENT F:  
FURTHER DISSEMINATION ONLY AS DIRECTED BY (Indicate Controlling DoD Office and Date) or HIGHER  
DoD AUTHORITY.

☐ DISTRIBUTION STATEMENT X:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES  
AND PRIVATE INDIVIDUALS OR ENTERPRISES ELIGIBLE TO OBTAIN EXPORT-CONTROLLED  
TECHNICAL DATA IN ACCORDANCE WITH DoD DIRECTIVE 5230.25, WITHHOLDING OF  
UNCLASSIFIED TECHNICAL DATA FROM PUBLIC DISCLOSURE, 6 Nov 1984 (Indicate date of determination)  
CONTROLLING DoD OFFICE IS (Indicate Controlling DoD Office).

☐ This document was previously forwarded to DTIC on \_\_\_\_\_ (date) and the  
AD number is \_\_\_\_\_

☐ In accordance with provisions of DoD instructions, the document requested is not supplied because:

☐ It will be published at a later date. (Enter approximate date, if known)

☐ Other. (Give Reason)

DoD Directive 5230.24, "Distribution Statements on Technical Documents," 18 Mar 87, contains seven distribution statements, as  
described briefly above. Technical Documents must be assigned distribution statements.

H. T. K. 5-8-98  
Authorized Signature/Date

HENRY T. KEARNEY, Chief, Public Affairs  
Print or Type Name  
732-532-1258  
Telephone Number



REPLY TO  
ATTENTION OF

## DEPARTMENT OF THE ARMY

HEADQUARTERS, U.S. ARMY COMMUNICATIONS-ELECTRONICS COMMAND

AND FORT MONMOUTH

FORT MONMOUTH, NEW JERSEY 07703-5000



Office of the Commanding General

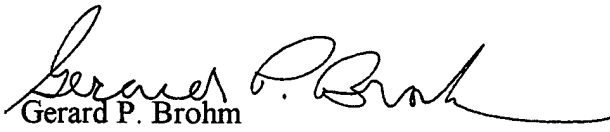
Ladies and Gentlemen:

On behalf of the Army C4IEW and Sensors Team, I am pleased to present these proceedings of the 1998 Advance Planning Briefing for Industry (APBI) entitled "Sustaining the Warfighter through Battlespace Integration." The objective of this publication is to provide industry with a comprehensive overview of our research and development programs, sustainment efforts and corresponding contract opportunities available to industry within the next five years.

We must strengthen our government and industry partnering so we may continue to get new technology to the soldier. The results of our partnering will be a greater understanding of each other's needs, and thus, superior equipment in the hands of our 21st Century Warfighter.

I welcome your participation in our APBI program.

Sincerely,

  
Gerard P. Brohm  
Major General, U.S. Army  
Commanding



# **DISCLAIMER**

**The use of trade names in this report does not constitute official endorsement of any products. This report may not be cited for purpose of advertisement.**

**The information provided is accurate as of the time of publication, and may be subject to change.**

**THE OVERALL  
CLASSIFICATION OF  
THIS PUBLICATION IS  
UNCLASSIFIED**

## CONTENTS

	Page
WELCOMING REMARKS.....	1
SESSION I .....	5
GUEST SPEAKER.....	7
CECOM'S PAPERLESS ACQUISITION PROCESS .....	11
 SESSION II.....	 47
LRC Overview .....	49
Business Functional Area Omnibus Contract .....	79
Omnibus Support Services for Logistics and Readiness Center .....	89
AN/VIC-3 Solicitation .....	107
Communications-Electronics Rechargeable Battery Acquisition .....	121
Aircraft Battery Acquisition.....	133
Improved Environmental Control Units.....	143
 SESSION III .....	 153
Research, Development and Engineering Center Overview .....	155
Sensors and Power Opportunities .....	169
Information Systems Technology.....	201
Software Engineering Center Contract Opportunities .....	227
Information Systems Engineering Command Contract Opportunities.....	245
PEO STAMIS Systems Opportunities .....	261

	Page
<b>SESSION IV .....</b>	<b>299</b>
Systems Management Center Overview .....	301
Small Computer Program.....	319
Long Term Cycle Support Contracts in Support of Nortel and AG Communications Systems Switched Systems .....	349
PM, DCATS Business Opportunities.....	361
PM, PSE Business Opportunities.....	381
PM, GPS Business Opportunities .....	427
<b>SESSION V .....</b>	<b>449</b>
PEO IEW&S Overview.....	451
PM, NV/RSTA Business Opportunities.....	485
PM, NV/RSTA Business Opportunities.....	519
<b>SESSION VI .....</b>	<b>565</b>
PEO C3S Overview.....	567
<b>EXECUTIVE PANEL.....</b>	<b>599</b>
<b>SYMPOSIUM PARTICIPANTS .....</b>	<b>601</b>
<b>LIST OF ACRONYMS.....</b>	<b>607</b>



# **WELCOMING REMARKS**

**MG GERARD P. BROHM**

**COMMANDING GENERAL  
CECOM**

# NOTES



# SESSION I

**GUEST SPEAKER**

**COLONEL WILLIAM S. RODAKOWSKI**

**DIRECTOR OF COMBAT DEVELOPMENTS  
U.S. ARMY SIGNAL CENTER & FORT GORDON**



# NOTES

# ***CECOM's PAPERLESS ACQUISITION PROCESS***



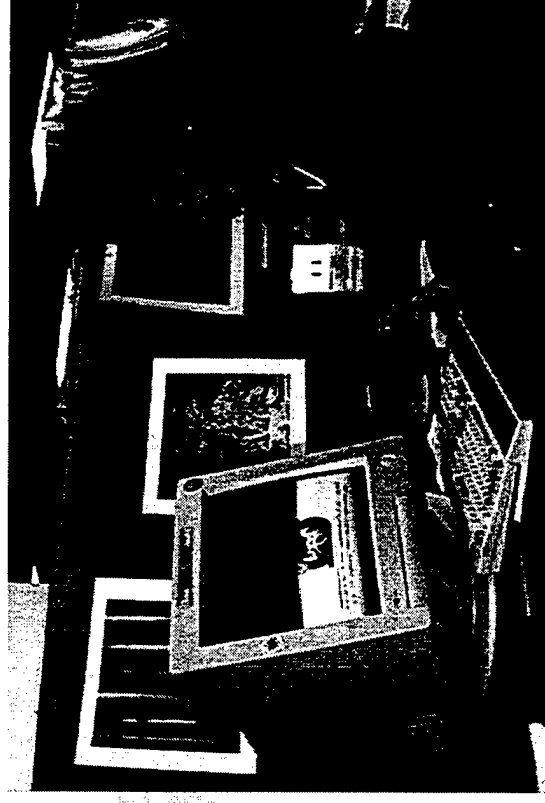
**MR. RIC KELEMEN  
DEPUTY DIRECTOR  
CECOM ACQUISITION CENTER**

**UNCLASSIFIED**

# ***PAPERLESS ACQUISITION APPROACH FOCUSED ON...***

**Web based Technology**

**Open Architecture**



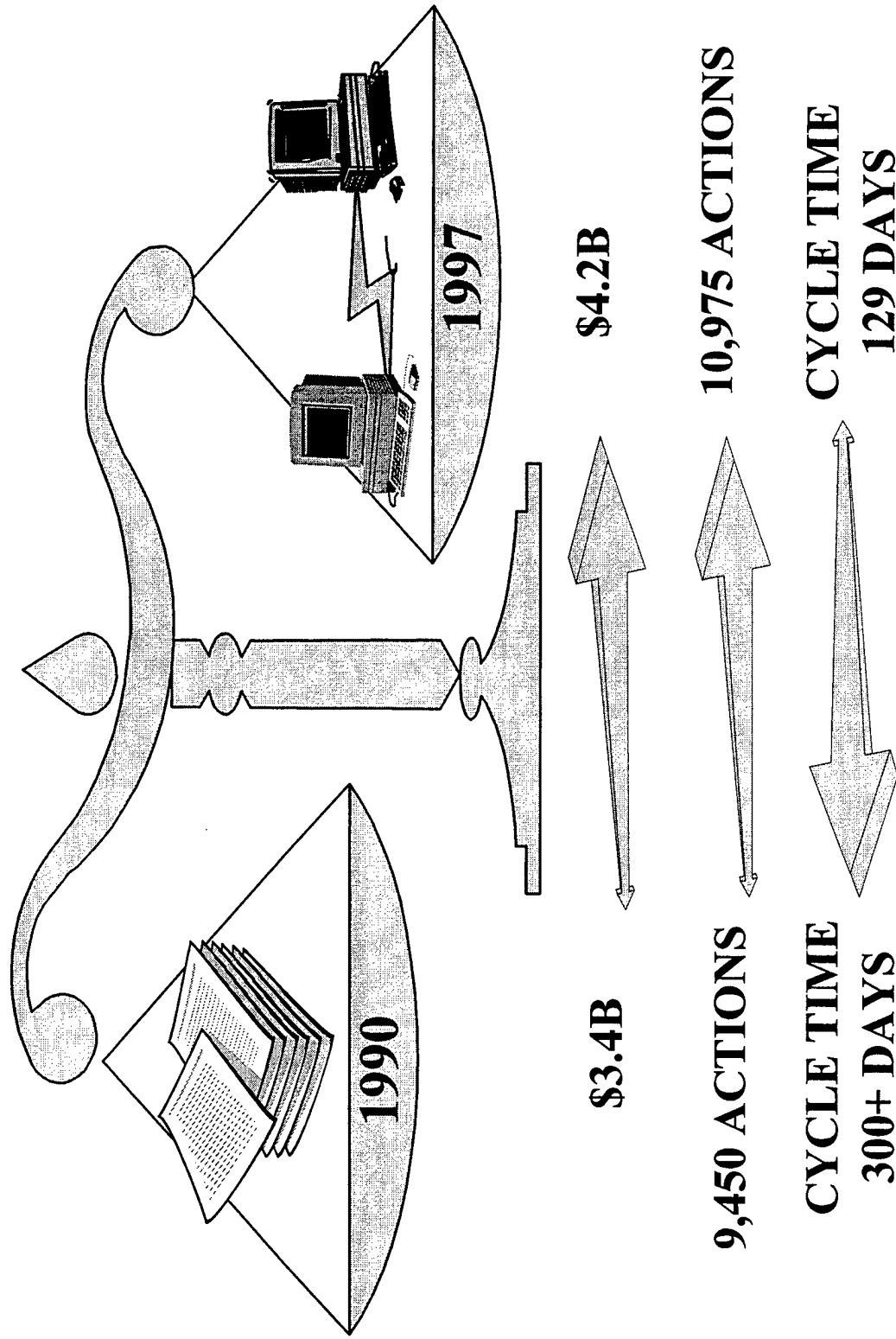
**Interoperability**

**Commercial  
Based Applications**

**Ease of use for Acquisition and Industry Partners**

**Efficient and practical Business Processes**

# WHERE WE WERE... WHERE WE ARE



# ***PROCESS IMPROVEMENTS TOWARD PAPERLESS ACQUISITIONS***

**1994**

**Electronic Bulletin Board**

**For all solicitations**

**8000 users**

**No on-line viewing capability**

**Slow to download**

**No centralized system of  
feedback for updates**

**Today**

**Captures entire acquisition process  
Business Opportunity Page  
for all solicitations**

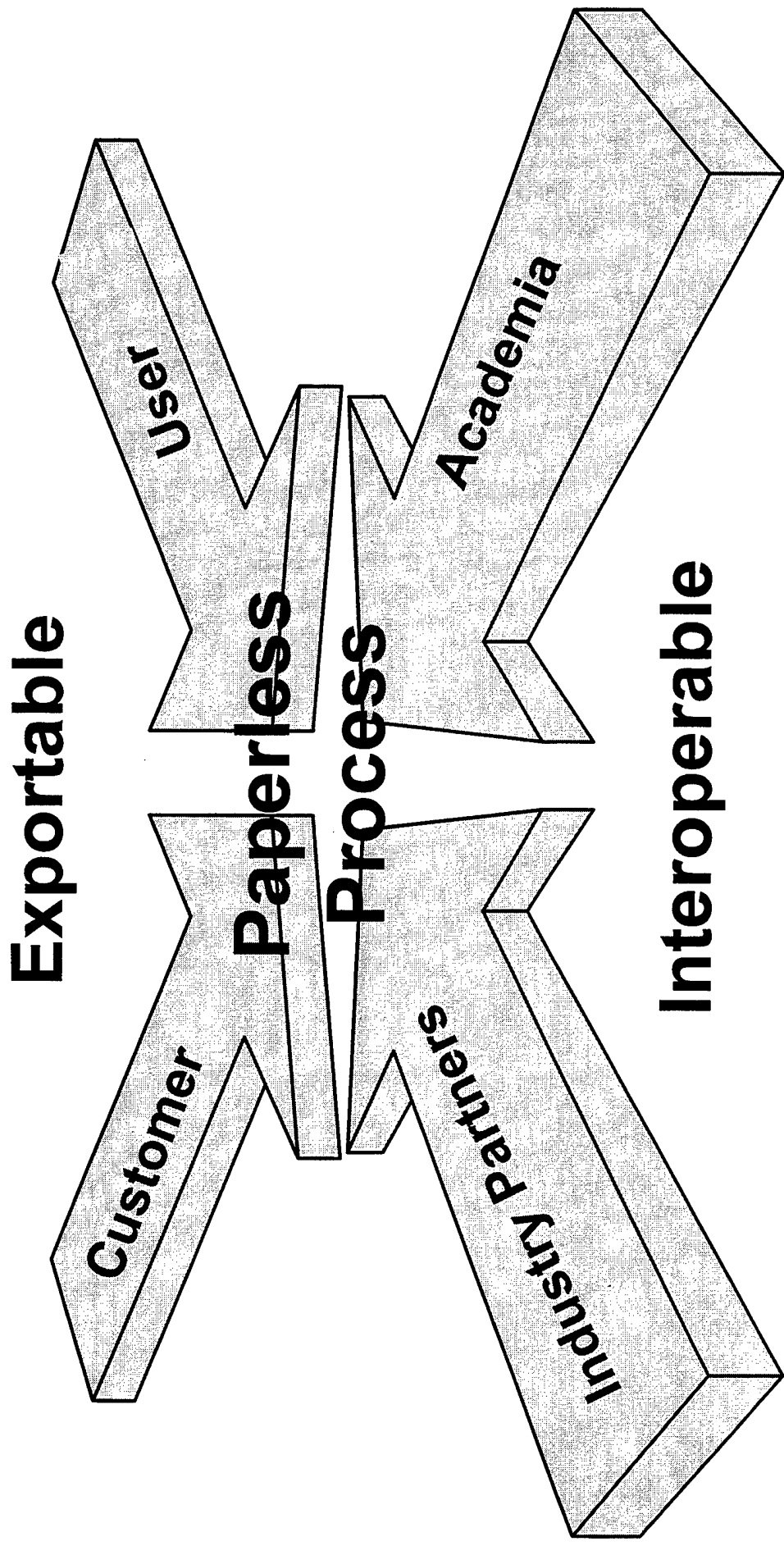
**Plus:**

**Proposal receipt  
items-for-negotiation**

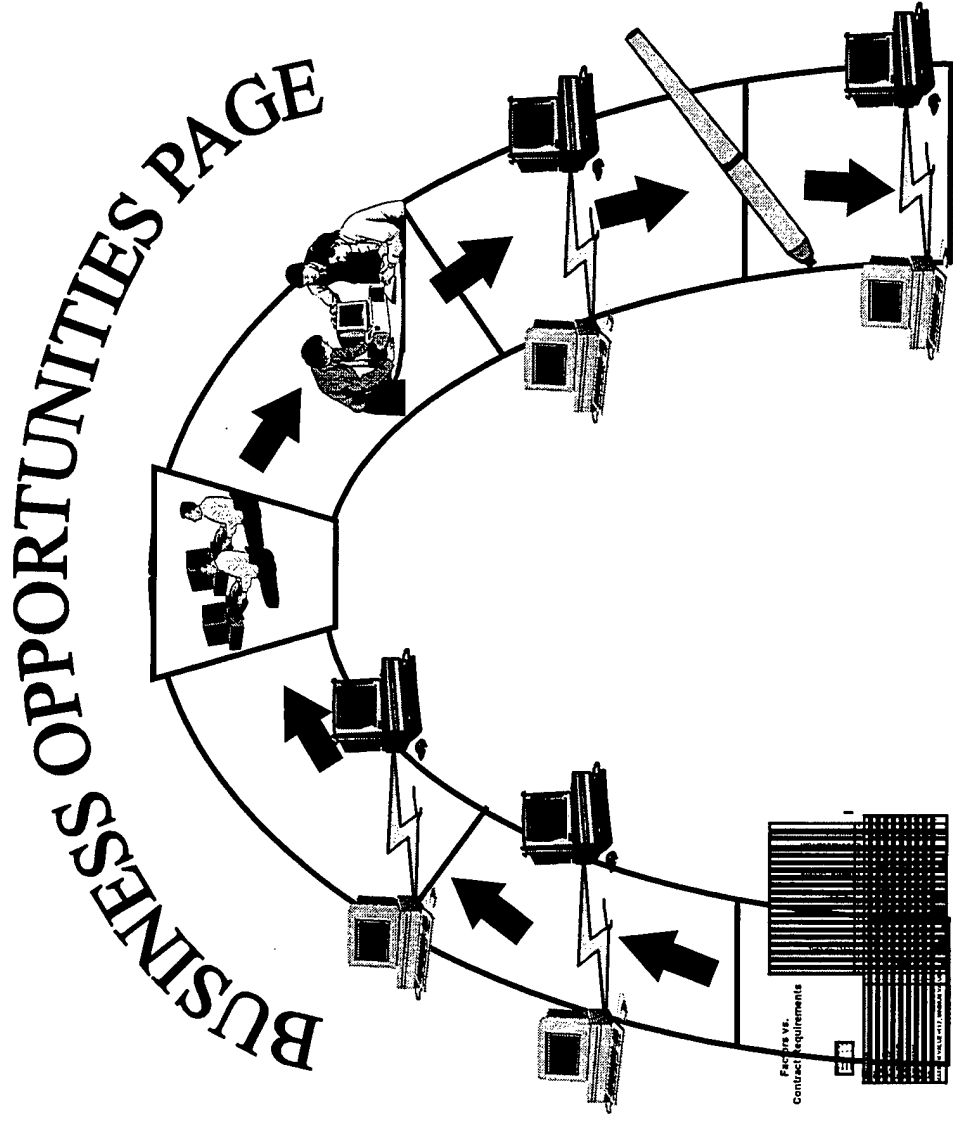
**Ease of use**

**Interoperable**

# ***TEAMING--KEY TO SUCCESS***



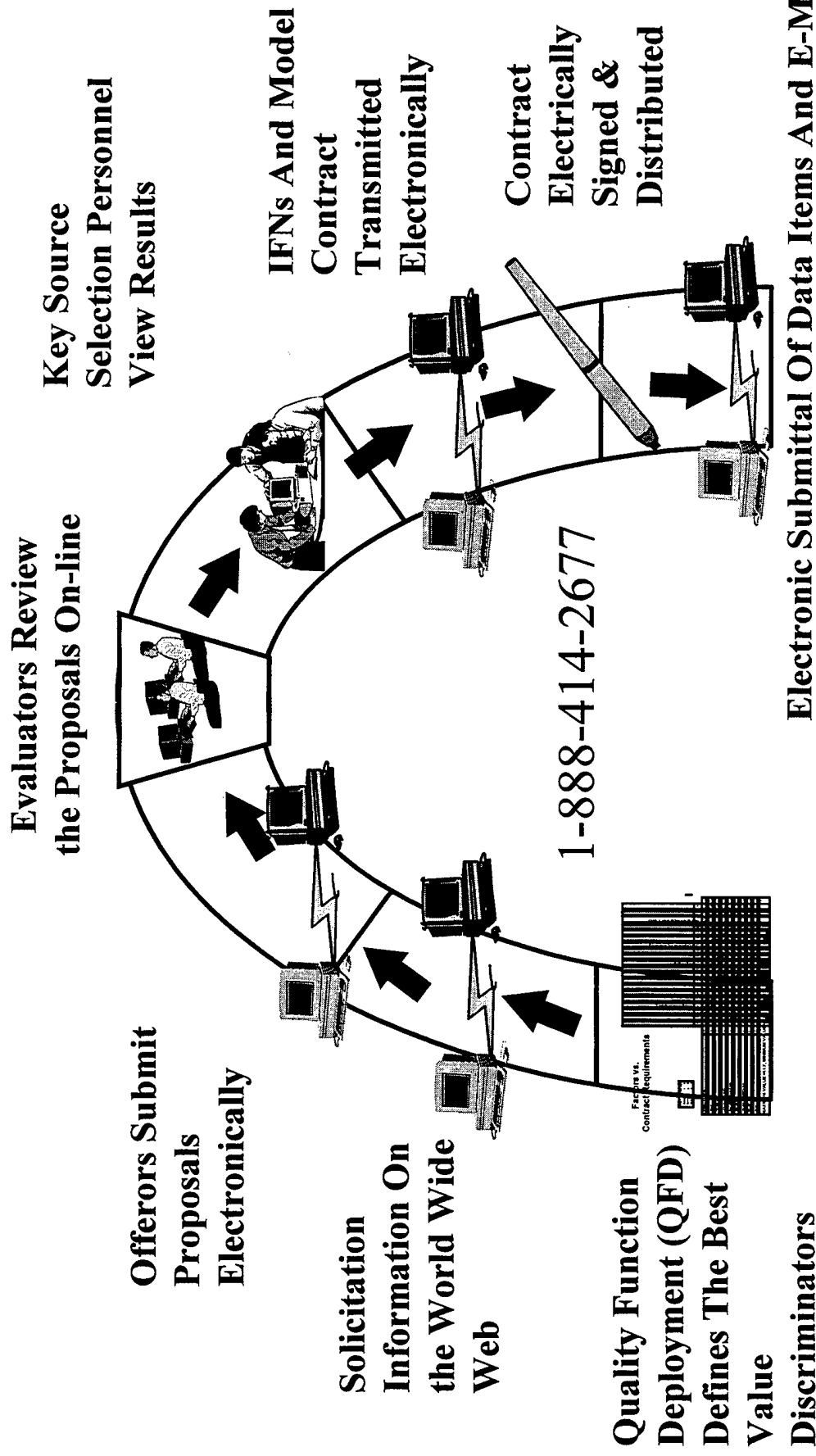
# TOTAL OPERATING PAPERLESS SYSTEM



# JOINT COMPUTER AIDED LOGISTICS SYSTEM

# ***TOTAL OPERATING PAPERLESS SYSTEM (TOPS)***

## ***THE ACQUISITION PROCESS***







Location: <http://acbp.monmouth.army.mil/>

What's New? What's Cool? Destinations Net Search People Software

# CECOM ACQUISITION CENTER

## WORLD WIDE

### BUSINESS OPPORTUNITY PAGE



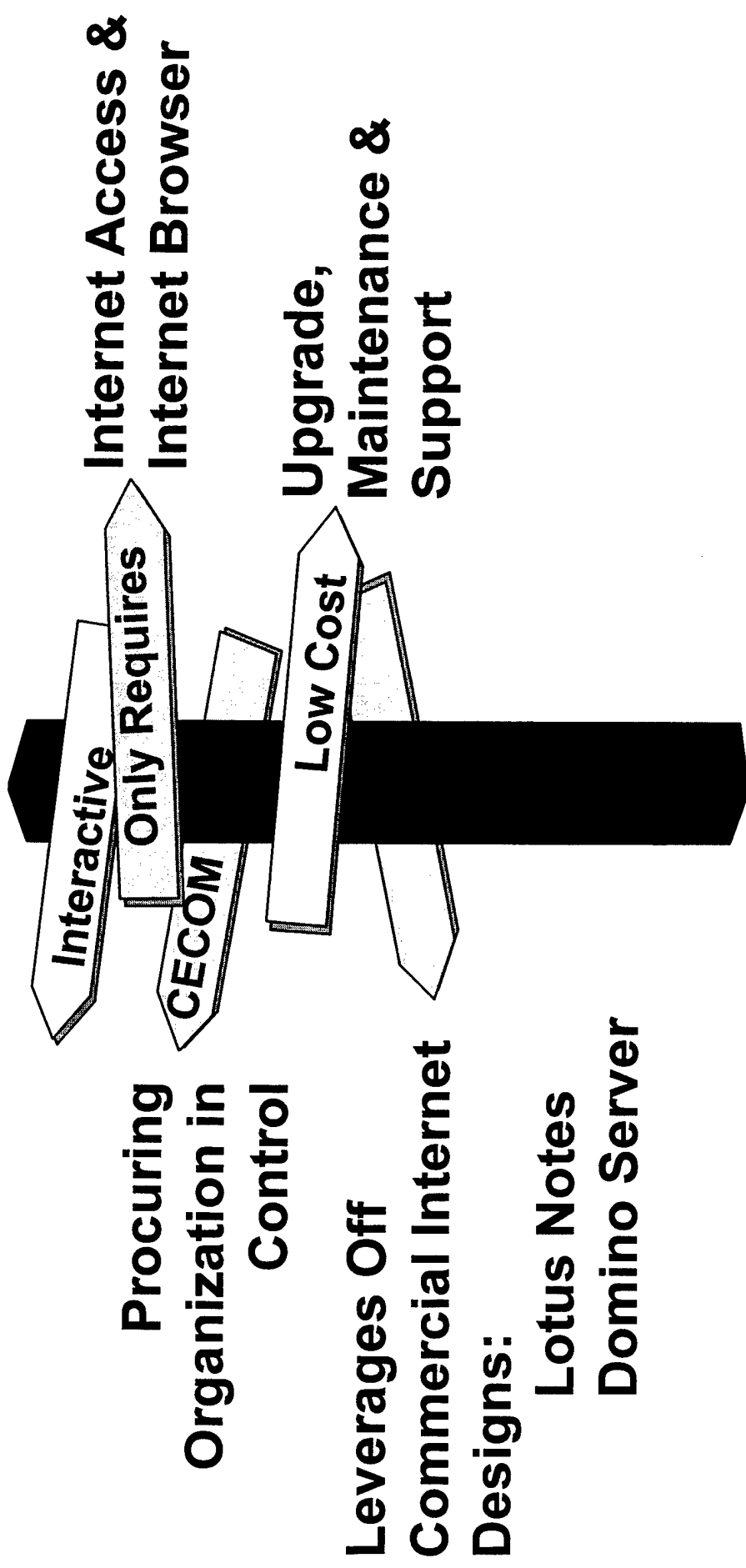
Welcome to the U.S. Army Communication Electronics Command  
(CECOM) Acquisition Center's Business Opportunities page.  
<http://acbp.monmouth.army.mil/>



## ***OUR WEB SITE***

**<http://acbop.monmouth.army.mil>**

# ***BUSINESS OPPORTUNITY PAGE***



***Allows System Improvement as Internet Capabilities Increase***

# ***BUSINESS OPPORTUNITY PAGE***



**Creates a Virtual Contracting Office Environment**



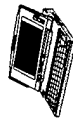
**Location Independent-Can Operate Anywhere**



**Real-time Communication Exchange**



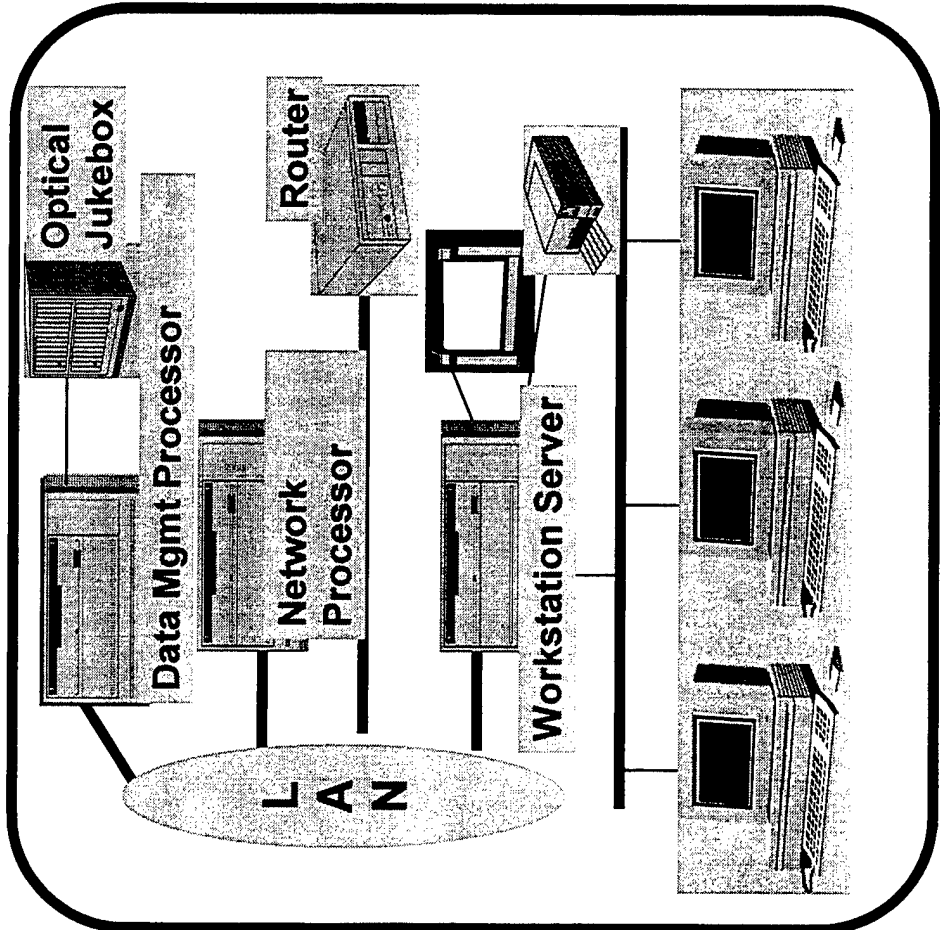
**On-line Viewing of Documents**



**Increased Competition through Expanded  
Supplier Base**

***Single, Low Cost Interface with Industry-Adopted by  
State Department for 200 plus Acquisition Offices,  
world wide, at cost of \$30k***

# BUSINESS OPPORTUNITY PAGE



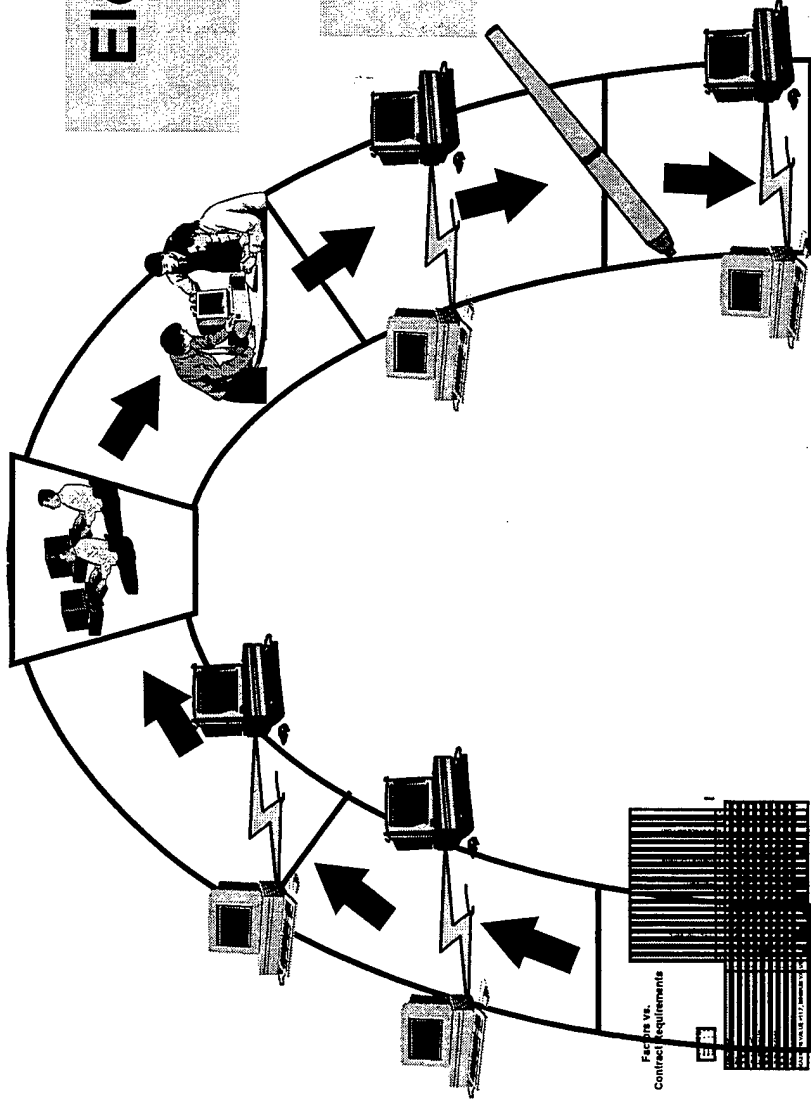
**Secure Socket Layer (SSL) encryption for protection during transmission of information**

**IFN posting and IFN response forms**

**Proposal Receipt, including cost data**

# WHERE WE ARE GOING...

## Electronic Source Selection Tool



**Electronic Signature  
Capability**

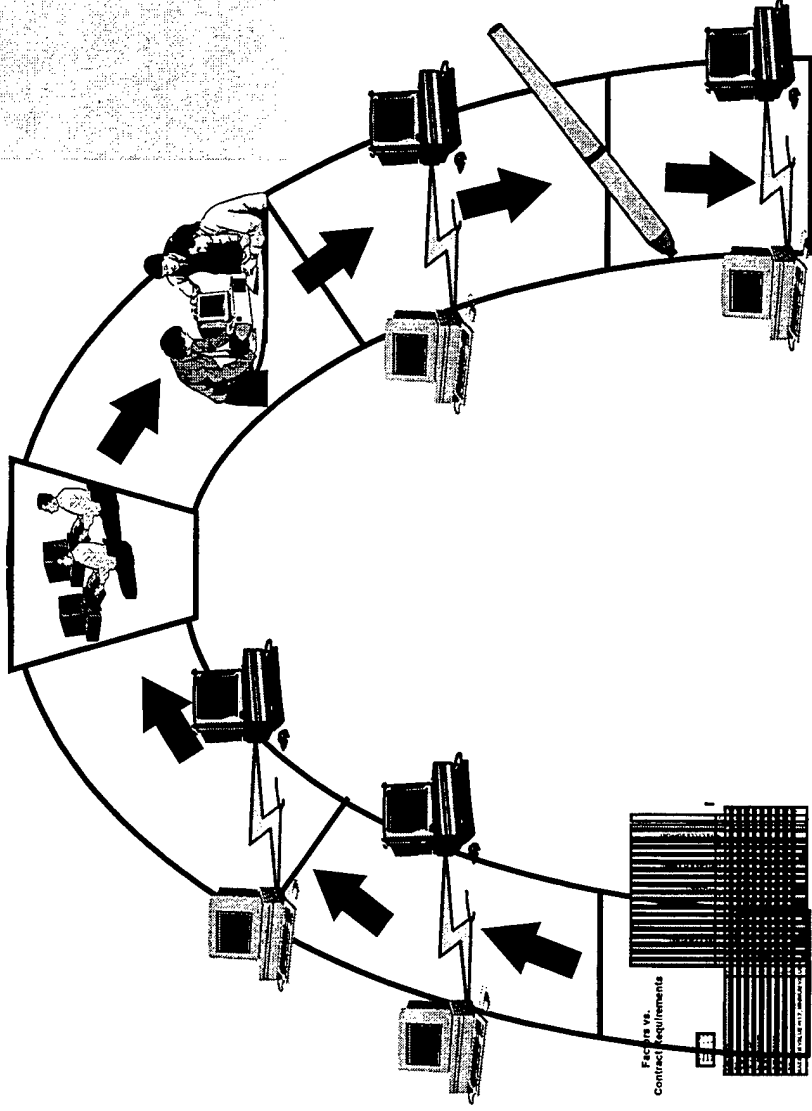
**Electronic Payment  
Through DFAS**

**On-line Archive of  
Awards**

**On-line Directory of Local Government Clauses**

# WHERE WE ARE GOING...

## Virtual Bid Room



Prospective sub-contractor  
lists  
available from BOP  
solicitation  
mailing list

Direct link from BOP  
to drawing database  
to view, download,  
request CD ROM  
drawings

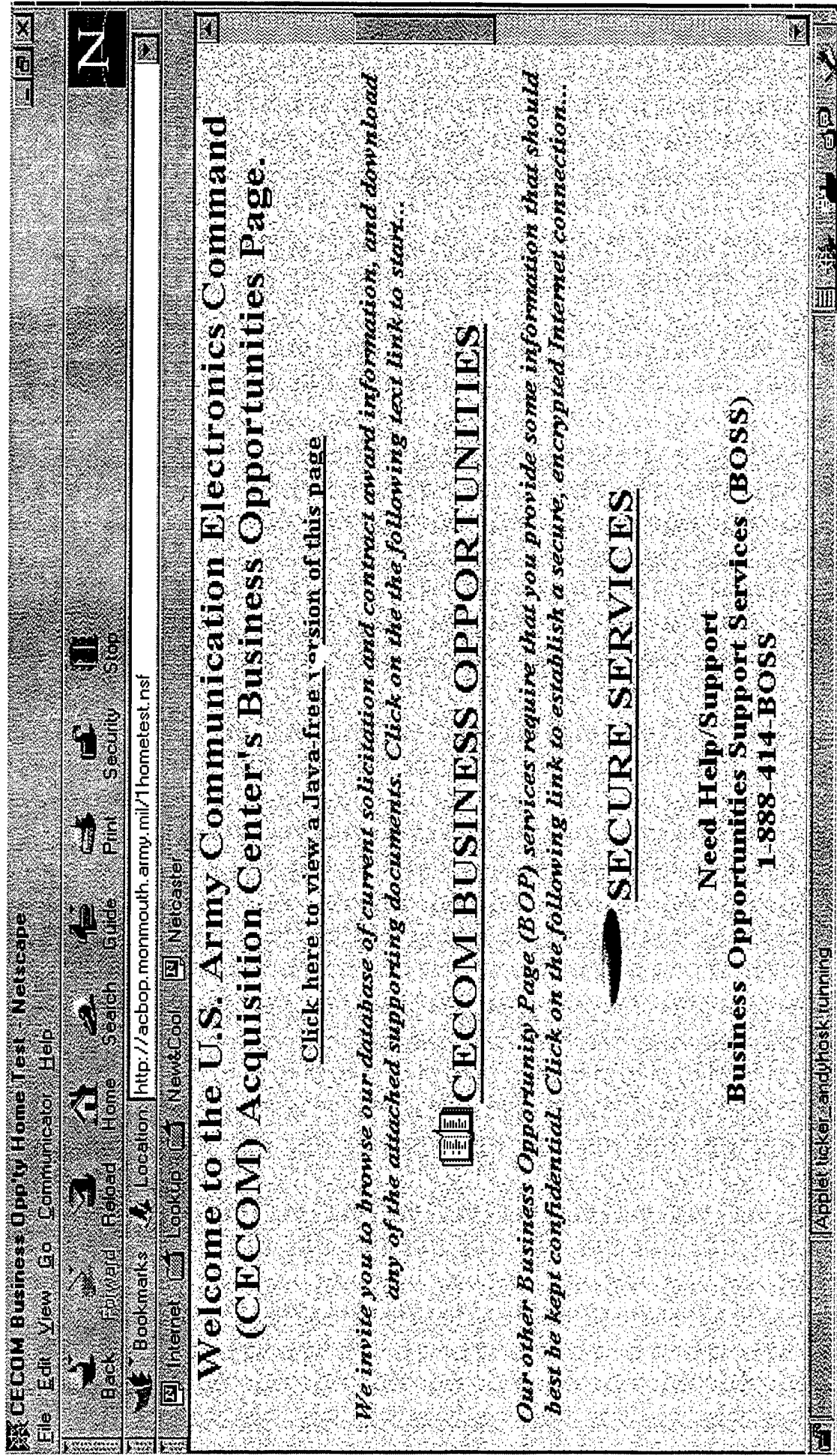
## Electronic Mail notification of New Business Opportunities

*“We have been designated  
Army test site for Paperless  
Acquisition”*



**...LEADING THE PAPERLESS CONTRACTING INITIATIVE:  
TO BE A TOTALLY PAPERLESS OPERATING  
SYSTEM BY THE YEAR 2000**





<http://acbp.monmouth.army.mil>

**VISIT OUR BOP BOOTH AT THE APBI**



# ***UPDATE OF 1997 LEVEL I APBI CONTRACT OPPORTUNITIES***

# ***AWARDED 1997 REQUIREMENTS***

TITLE: STAMIS COMPUTER CONTRACT II (SCCII)  
AWARDED: OCT 97  
DOLLAR AMT: \$469.6M  
CONTRACTOR: GTSI (GOVERNMENT TECHNOLOGY  
SERVICES, INC.)

TITLE: QUALITY ASSURANCE, ACCEPTANCE TESTING  
AND T&E SUPPORT SERVICES  
AWARDED: SEP 97 (MULTIPLE AWARD)  
DOLLAR AMT: \$2.07M EACH  
CONTRACTOR: FC BUSINESS SYSTEMS  
CORREA

TITLE: INFORMATION SECURITY ENGINEERING  
SUPPORT SERVICES

AWARDED: SEP 97

DOLLAR AMT: \$25.6M (5 YEARS)

CONTRACTOR: J.G. VANDYKE

TITLE: SOFTWARE ENGINEERING AND TECHNICAL  
SUPPORT

AWARDED: JAN 98 (MULTIPLE AWARD)

DOLLAR AMT: \$ 88.3M (5 YEARS)

\$108.1M (5 YEARS)

\$ 94.5M (5 YEARS)

CONTRACTOR: FRONTIER APPLIED SCIENCES  
EER SYSTEMS  
RESEARCH ANALYSIS

TITLE: LIGHTWEIGHT AIRBORNE MULTI SPECTRAL  
COUNTERMINE DETECTION SYSTEM  
AWARDED: MAR 98 (ADDITIONAL CONTRACTS WILL BE  
AWARDED 4QFY98) SUPPORT CONTRACT-DELIVERY  
ORDER

DOLLAR AMT: \$377K

CONTRACTOR: EORI

TITLE: MINE HUNTER/KILLER  
AWARDED: 2QFY98 (ADDITIONAL CONTRACTS WILL BE  
AWARDED THROUGH FY99) - SUPPORT CONTRACT -  
DELIVERY ORDER - MULTIPLE AWARD  
DOLLAR AMT: \$150K AND \$100K  
CONTRACTOR: SAIC

FIBERTEK

TITLE: MODELING AND SIMULATION  
AWARDED: NOV 97  
DOLLAR AMT: \$99,993  
CONTRACTOR: ATLANTIC CONSULT SERVICES

TITLE: BATTLE PLANNING  
AWARDED: MULTIPLE AWARD: 1QFY98  
NOV 97

DOLLAR AMT: \$98,150  
\$97,772  
CONTRACTOR: AUSTIN INFO SYSTEMS  
DUAL CORP.

TITLE: CICM VHF/UHF COSITE MITIGATION FOR  
BRIGADE LIGHT DIGITAL TOC (LDTOC)

AWARDED: 2QFY98

DOLLAR AMT: \$810K

CONTRACTOR: XETRON

TITLE: STANDARD SYSTEMS TECHNOLOGY SUPPORT-2  
(SSTS-2)

**(TITLE CHANGED TO: ENHANCE TECHNOLOGY-1)**

AWARDED: 2 APR 98 - BPA



# ***ACTIVE 1997 REQUIREMENTS***

TITLE: ARMY PERSONAL COMPUTER-3  
RELEASE RFP: 3QFY98  
FORECAST AWARD: 2QFY99

TITLE: ARMY PORTABLE COMPUTER-3 (PORT-3)  
RELEASE RFP: 1QFY99  
FORECAST AWARD: 2QFY99

TITLE: INFRASTRUCTURE ARCHITECTURE SOLUTIONS-1  
(IAS-1)  
RELEASE RFP: 4QFY98  
FORECAST AWARD: 1QFY99

TITLE: ARMY VIDEO TELECONFERENCING-1 (VTC-1)  
RELEASE RFP: 3QFY98  
FORECAST AWARD: 4QFY98

TITLE: MAXI-MINIS AND DATABASES-1 (MMAD-1)  
RELEASE RFP: TBD  
FORECAST AWARD: TBD

TITLE: MOVEMENT TRACKING SYSTEM (MTS)  
RELEASE RFP: JUN/JUL 98  
FORECAST AWARD: TBD

TITLE: FIREFINDER BLOCK II P3I PROGRAM  
RELEASED RFP: NOV 97  
FORECASTED AWARD: MAY 98

TITLE: THERMAL OMNIBUS  
RELEASED RFP: JAN98  
FORECASTED AWARD: JUN98

TITLE: LIGHTWEIGHT VIDEO RECONNAISSANCE  
SYSTEM (LVRS)  
RELEASE RFP: 1QFY00  
FORECAST AWARD: 2QFY00

TITLE: OMNIBUS V  
RELEASE RFP: MAY 98  
FORECAST AWARD: 4QFY98

TITLE: ARMY INTEROPERABILITY ENGINEERING (AIE)  
DEVELOPMENT, INTEGRATION, & TECHNICAL SUPPORT  
RELEASE RFP: 3QFY98  
FORECAST AWARD: 1QFY99

TITLE: LIFE CYCLE SYS & SOFTWARE ENGINEERING  
SUPPORT FOR FIRE SUPPORT COMMAND, CONTROL, FIRE  
DIRECTION AND OTHER SYSTEMS  
RELEASE RFP: 3QFY98  
FORECAST AWARD: 1QFY99

TITLE: JTACS SYSTEMS AND SOFTWARE ENGINEERING  
SUPPORT FOR TACTICAL CIRCUIT/MEASURE/PACKET  
SWITCHES

RELEASE RFP: 1QFY99

FORECAST AWARD: 3QFY99

TITLE: MCDS HARDWARE MAINTENANCE & TECHNICAL  
SUPPORT

RELEASE RFP: 3QFY99

FORECAST AWARD: 1QFY00

TITLE: DEPT OF ARMY SOFTWARE SUPPORT SERVICES  
UMBRELLA 4 (DASSS-U4)

RELEASE RFP: 2QFY00

FORECAST AWARD: 3QFY00

TITLE: R&D, TRAINING AND TECHNICAL SUPPORT  
SERVICES

RELEASE RFP: 3QFY98  
FORECAST AWARD: 4QFY98

TITLE: ELECTRONIC SUPPORT/SIGNAL INTELLIGENCE  
TECHNIQUES

RELEASE RFP: TBD  
FORECAST AWARD: TBD

TITLE: SOLID STATE NEAR IR SENSORS  
RELEASE RFP: 3QFY98  
FORECAST AWARD: TBD

TITLE: INTEGRATED SITUATIONAL AWARENESS AND  
COUNTERMEASURES

FORECAST AWARD: SPLIT: 1QFY99  
1QFY99

TITLE: MULTI-FUNCTION STARING SENSOR SUITE  
(MFS3)

FORECAST AWARD: 4QFY98

TITLE: SHF SATELLITE COMM OTM  
ANTENNA/POSITIONER/TRACKER  
FORECAST AWARD: 3QFY98



TITLE: ACUS RADIO MODERNIZATION PROGRAM  
RELEASE RFP: FEB 98  
FORECAST AWARD: JUN 98

TITLE: SCAMP BLOCK II  
RELEASE RFP: 3QFY00  
FORECAST AWARD: TBD

TITLE: COMMON NETWORK PLANNING SOFTWARE  
RELEASE RFP: SEP 98  
FORECAST AWARD: TBD

TITLE: AN/GSC-52 MODERNIZATION PROGRAM  
RELEASED RFP: FEB 98  
FORECAST AWARD: JUN 98



# ***INACTIVE 1997 REQUIREMENTS***

TITLE: NETWORKS-1 (NET-1)  
REASON: POSTPONED INDEFINITELY

TITLE: PRECISION NAVIGATION  
REASON: CANCELED

TITLE: ADVANCED POWER SOURCES  
REASON: CANCELED

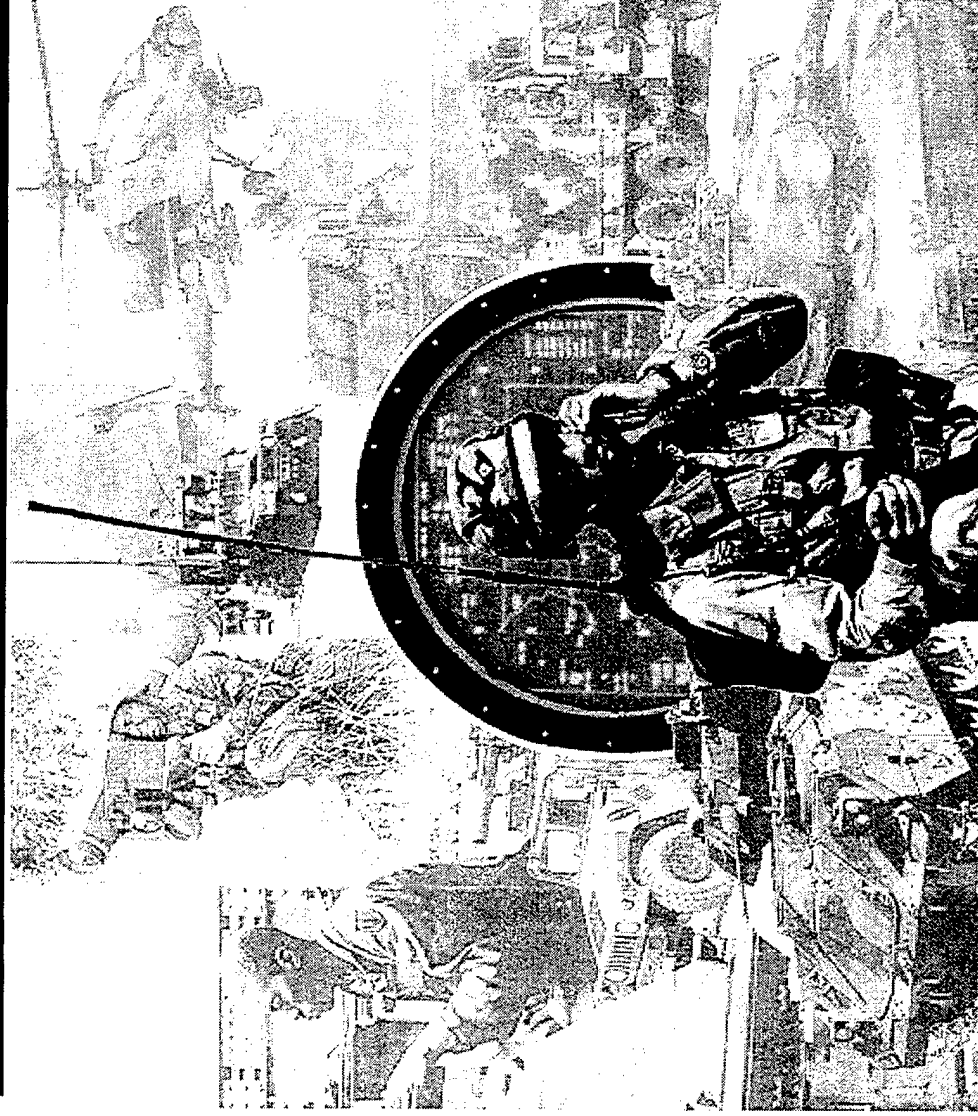
TITLE: DEFENSE SATELLITE COMMUNICATIONS  
SYSTEM SPECTRUM MANAGEMENT SYSTEM  
REASON: POSTPONED INDEFINITELY



# NOTES

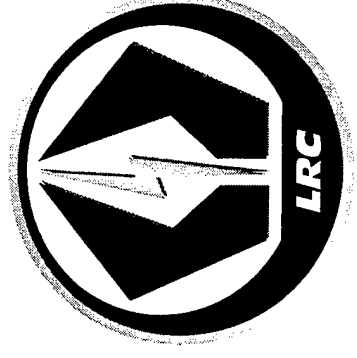
# SESSION II

**US Army Communications-Electronics Command  
Logistics and Readiness Center (CECOM LRC)**

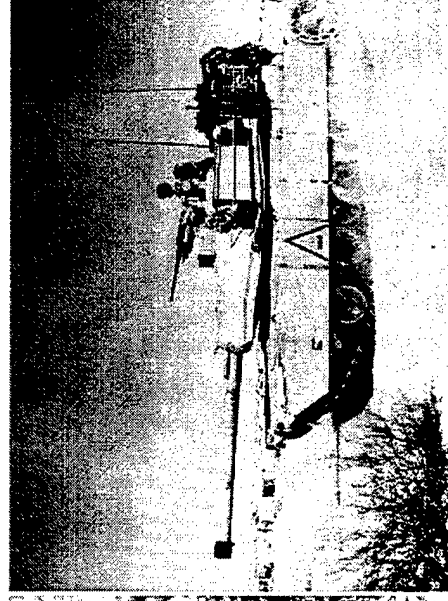
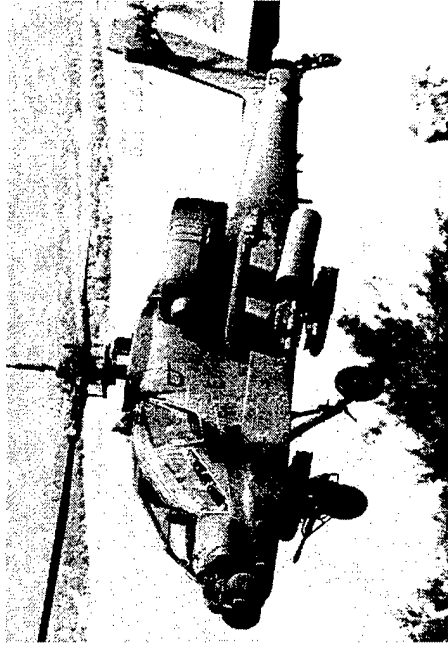


# **LRC Overview**

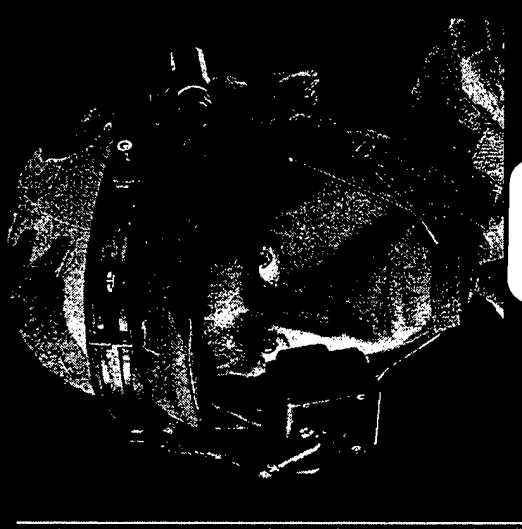
*Presented by:*  
*Anthony LaPlaca*  
*Director*



**UNCLASSIFIED**



# **LRC Vision: To be the C<sup>4</sup>IEWS logistics provider of choice**



# ***Logistics Organization***

## ***Logistics & Readiness Center***

***National  
Inventory  
Control Point***

***Integrated  
Logistics  
Planning and  
Development***

***Production  
and  
Industrial  
Base  
Engineering***



***National  
Maintenance  
Point***

***System Fielding  
& New  
Equipment  
Training***

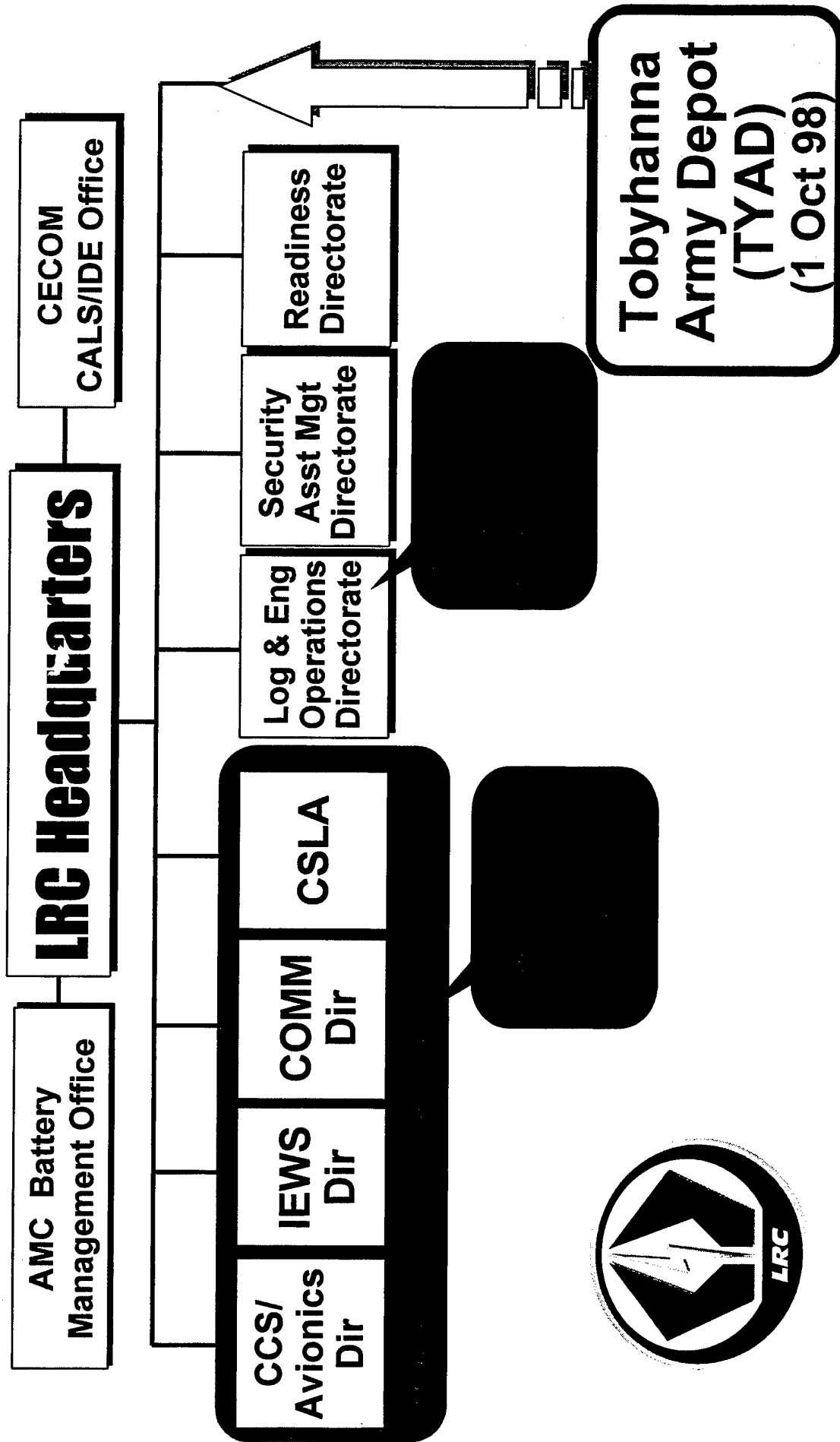
***Security  
Assistance  
Program  
Management***

***Technical  
Assistance  
for Systems***

***Depot  
Maintenance***



# Our Structure



# ***Top 15 Objective Areas for FY 98***

- Reshape
- Logistics Modernization
- Force XXI
- ✓ Power Sources Center of Excellence
- TYAD Transition from Industrial Operation Command (IOC) to LRC
- Go-to-War Support Capability
- Inventory Reduction (Cycle Time Reduction)
- Modernization Through Spares
- Work Redistribution (SALC to TYAD)
- ✓ Life-Cycle Support Cost Reduction
- Velocity Management
- Integrated Data Environment
- Business Development
- INFOSEC
- Single/Virtual IMMC





# ***POWER MANAGEMENT FOR THE ARMY***



# ***THE OBJECTIVE***

**The most power efficient  
solutions for the least weight  
and the least cost**

## **THE VARIABLES**

- ➔ Technology of the power source
- ➔ Power demands of the device being powered
  - ➔ Operational requirements

# ***POLICIES***

**AAE Policy Memorandum - Power Sources Management  
signed by G. Decker on 30 Sep 96 states:**

- Use standard batteries**
- Design for power management**
- Use rechargeables**

**DA, DCSLOG Rechargeable Battery Implementation  
Policy signed by LTG Coburn on 29 Aug 97 states:**

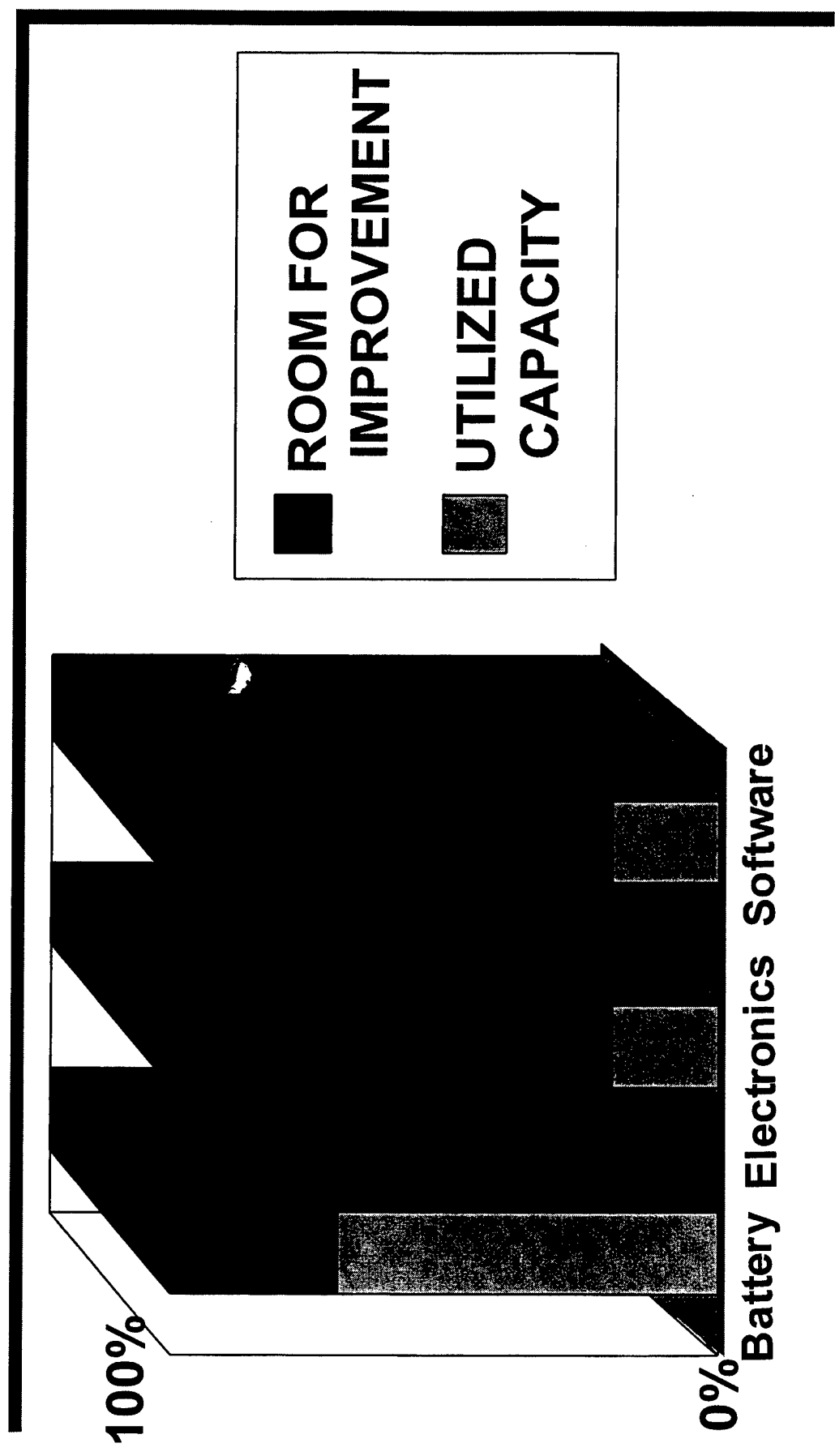
**Effective 1 October 1998, all units (except units which  
use less than 12 batteries per year) will use rechargeable  
communications/ electronics batteries for garrison duty,  
training, and Support and Stability Operations the  
Commander deems appropriate.**

# FUTURE POWER SOURCE TECHNOLOGIES

---

**There is no "SILVER BULLET" in  
the power sources arena,  
however, it is an important part of  
a multi-disciplinary approach**

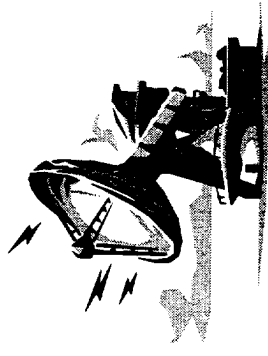
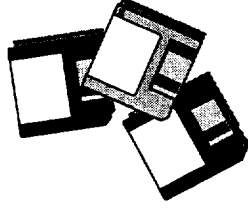
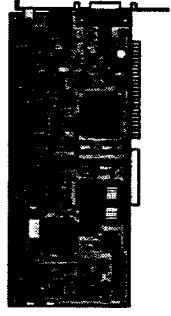
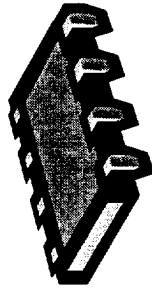
# POWER IMPROVEMENT POTENTIAL



# ***POWER MANAGEMENT***

## ***A MULTI- DISCIPLINED APPROACH***

- Engineering features (hardware, software and architecture) within electronic equipment that provide automatic regulation and conservation of electrical energy usage.
- Efficient power generation & storage
- Operational environment





# **WHAT DOES POWER MANAGEMENT MEAN TO:**

**SOLDIERS** - Lighten Load, Longer Mission,  
Reduced Training

**LOGISTICIANS** - Lower Cost (Battery & Fuel),  
Reduced Maintenance, Logtrains

## **ENABLERS**

**TRADOC** - Power Management Requirements and  
Exit Criteria

**PMs/PEOs** - Requirements, Source Selection, Exit  
Criteria

**AMC/MSCs** - Modernization Through Spares (MTS)  
**Contractors** - Power Management as a Design  
Criteria From Beginning

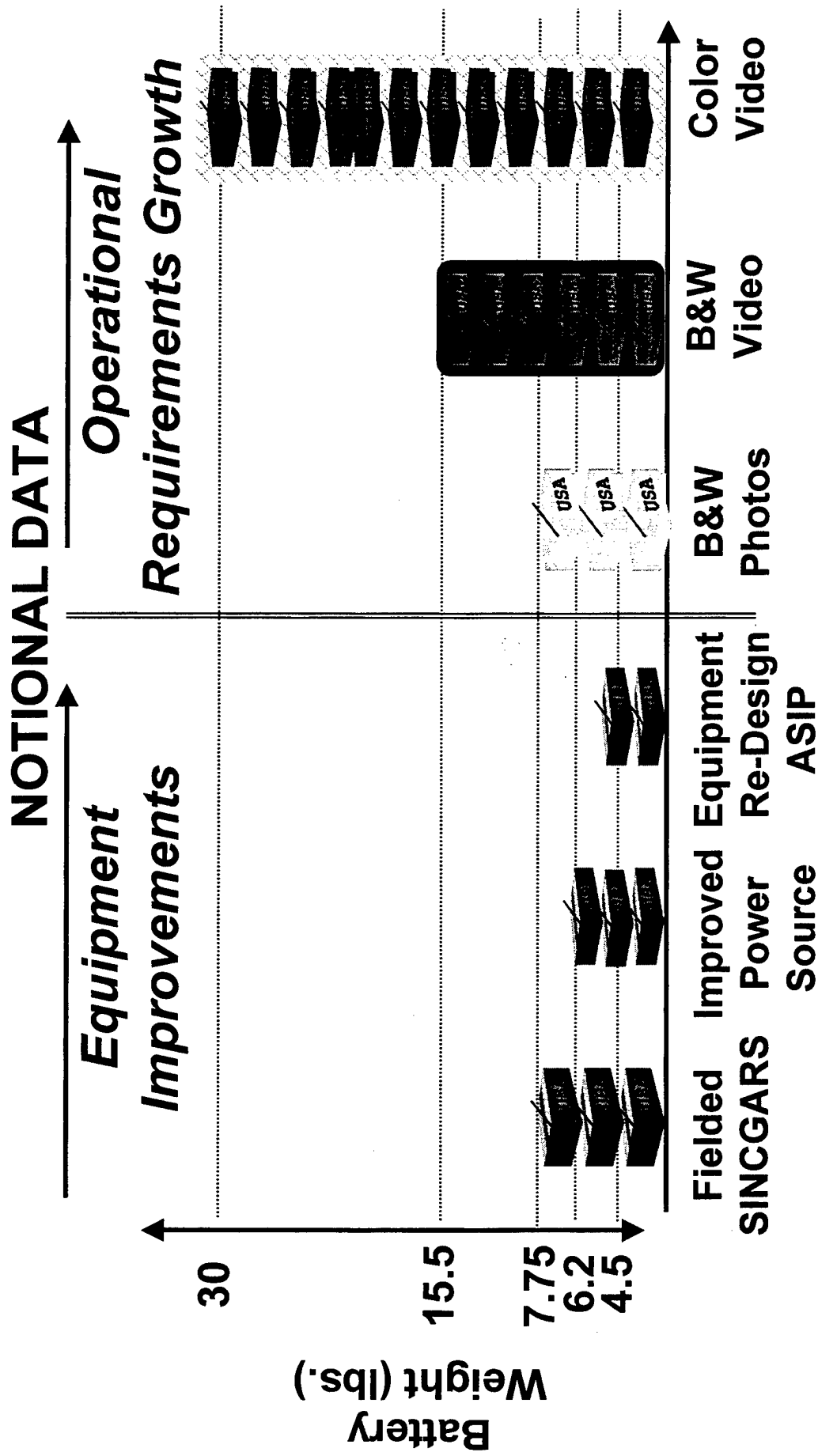
# ***POWER MANAGEMENT -***

## ***A COMBINATION OF SOLUTIONS***

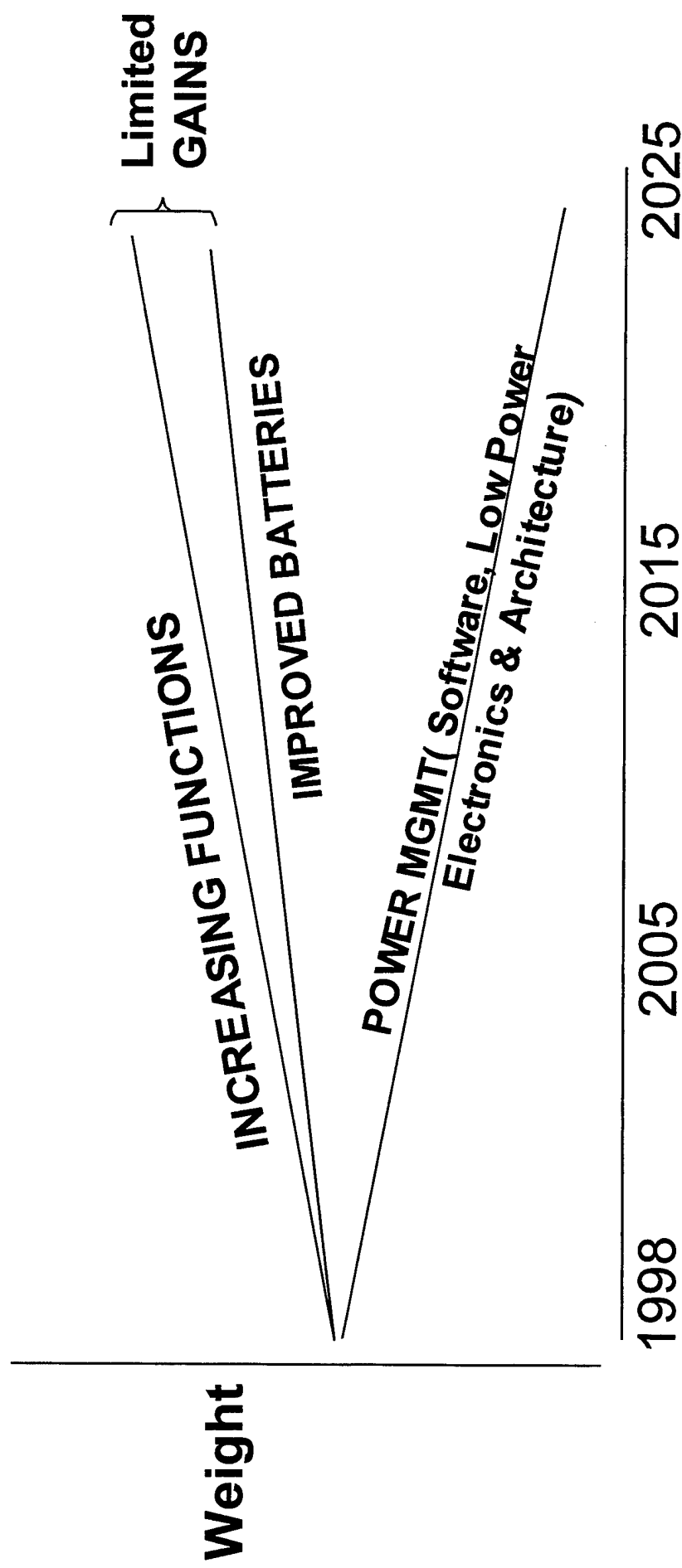
- Light-Weight Power Sources
  - Batteries
  - Fuel Cells
  - Ultracapacitors
  - Thermophotovoltaics
  - Hybrid Systems
  - Microturbines
- Low Power Electronics
- Develop CAD and Analysis Tools Capability
- Smart Use of Power
- AAE Power Management Policy
- TRADOC-Initiated Requirements
- General and System Specific Criteria
- Power As Independent Variable (PAIV)

# TOTAL SYSTEMS APPROACH

## SINGARS: 72 HOUR MISSION



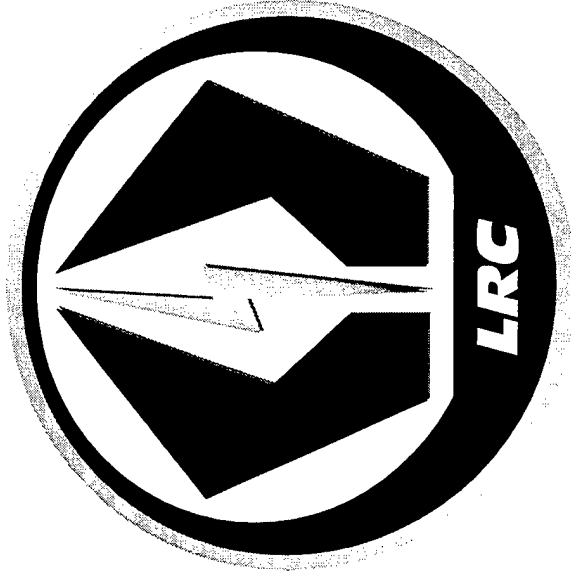
# WARFIGHTER ELECTRONICS BURDEN



# ***PLAN***

- Continue to improve power sources for legacy systems [2x]
- When applicable, redesign legacy systems utilizing power management techniques
- Acquisition of new systems - ensure heavy emphasis on power management evaluation
- Continue work with PSCOE and ensure all materiel developers and combat developers understand the functionality/weight/cost tradeoffs
- Promote Horizontal Technology Integration (HTI)
- Increase collaboration between Government, industry and academia - e.g., Power Sources Conference

**BOTTOM LINE: COMPREHENSIVE, MULTI - DISCIPLINARY APPROACH**



# ***OPERATION & SUPPORT (O & S) COST REDUCTION***

# ***AAE/VCSA Memorandum***

- **Reducing O&S Costs is a top Army priority and ranks above nominal performance increases in the requirements determination process**
- **Modifications and upgrades that provide savings during the POM period will receive funding priority**
- **Performance evaluations and support forms for all PMs and TRADOC system managers will include remarks addressing O&S cost reduction efforts**

# ***Life Cycle Cost Support***

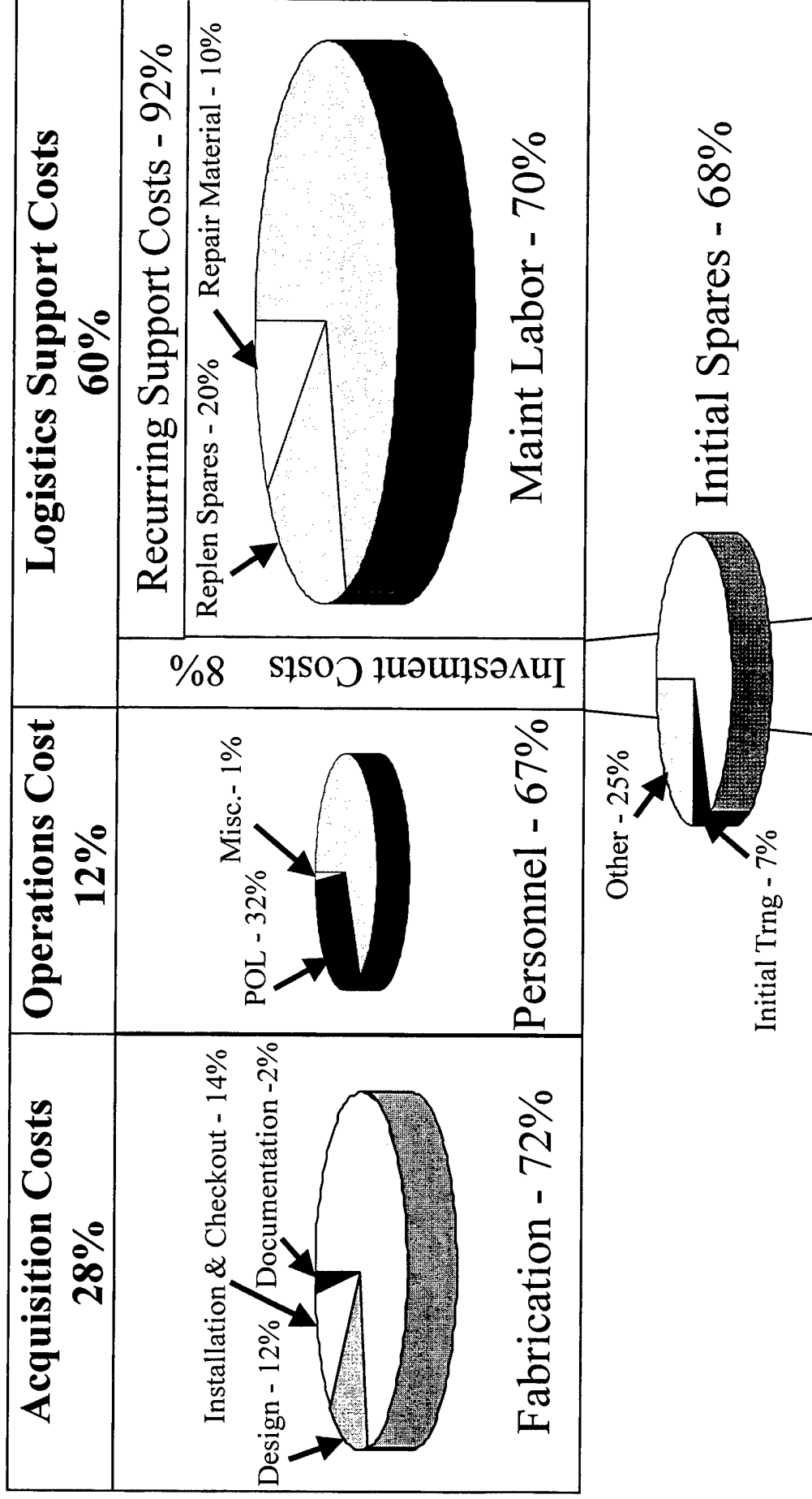
## ***Reduction:***

**REQUIREMENT: Acquisition and Reform initiatives require PEOs and PMs to include in solicitations the requirement to achieve a specified Cost As an Independent Variable (CAIV) for O&S costs**

**OUR PROMISE: Provide PMs and non-PM managed systems with relevant methods to evaluate contractors CAIV in Source Selection Evaluation Boards**



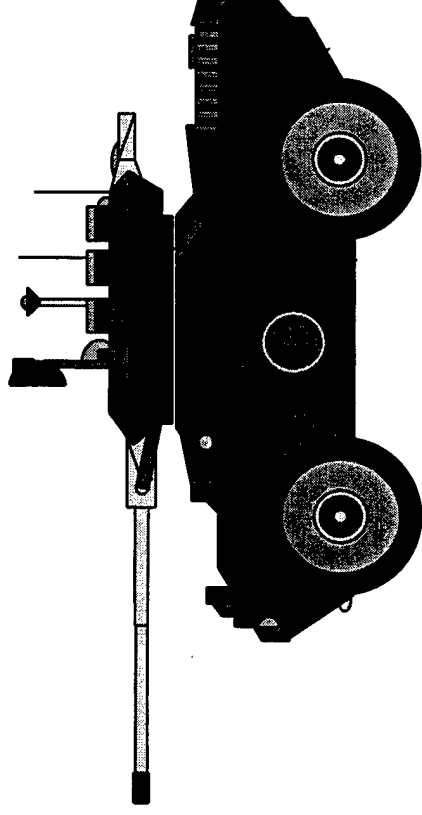
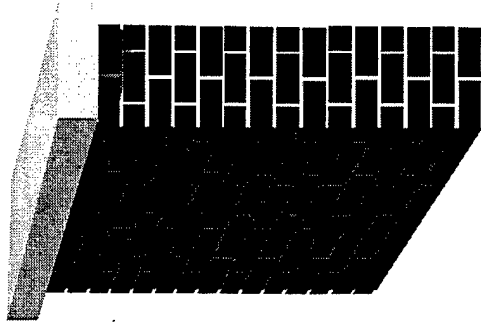
# Life Cycle Cost Distribution



Source: DA ILS Symposium, 5-7 Nov 97, Life Cycle and O&S Costs  
by Mr.. James B. Emahiser/ADUSD(L)

# Challenges

- Baseline O&S
- Evaluate O&S
- Reduce O&S
- Measure O&S



# ***Our Approach***

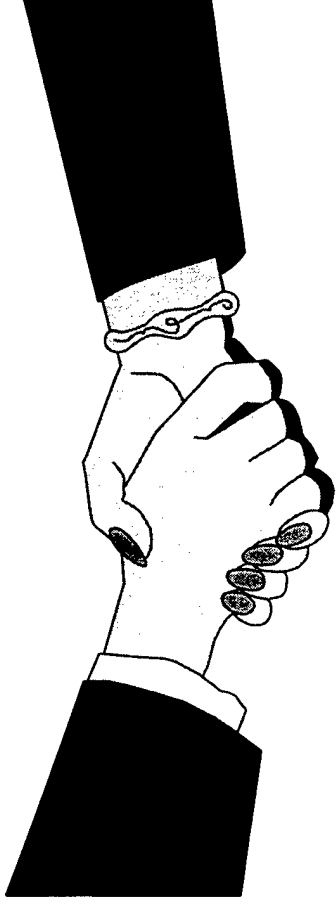
- **Critical Parameters (Cost Drivers)**
- **Industry Involvement**
- **Partner with TRADOC for the ORD**
- **Partner with Industry (Programmatic)**
- **Acquisition Efforts (Continuous advancement to reduce costs)**

# ***O&S Cost Reduction Initiatives***

- **Direct Vendor Delivery**
- **Rapid Transportation**
- **Dedicated (Scheduled) Deliveries**
- **Order Ship Time Reduction (OST)**
- **Integrated Data Environment (IDE)**
- **Joint Total Asset Visibility (JTAV)**
- **Rightsizing Civilian Workforce**
- **IMPAC Cards**
- **Flexible On-Demand Manufacturing**
- **Contracts**
- **Regional Contracts for Installation Support**
- **Material**
- **Data Conversion**
- **Technology Insertion**
- **CECOM Operating & Support Cost Reduction (OSCR)**
- **Modernization Through Spares (MTS)**
- **Cost As an Independent Variable (CAIV)**

# ***The Vision***

**The Government will consider all inputs  
with the goal of developing a *unified*  
*approach to LCC within Team C4IEWS -*  
*focusing on O&S!!!!***



## ***What's on Our Website***

**<http://www.monmouth.army.mil/cecom/lrc/>**

- **Information for others about the LRC mission**
- **Information for the LRC Workforce**
- **Tools for the LRC Workforce**



*Bottom Line: The Soldier*

### *Urgent News*

#### ▼ Who We Are

- ◆ [Organizational Chart](#)
- ◆ [LRC Office Symbols](#)
- ◆ [LRC Personnel Search](#)
- ◆ [C4IEWS White Pages](#)

#### ▼ Logistics Support

- ◆ [LAR Locator](#)
- ◆ [Logistics Reinvention](#)
- ◆ [C4IEWS Project Book](#)
- ◆ [Hard Core Report](#)
- ◆ [Safety Messages](#)
- ◆ [The CECOM & NDIA International Trade Show](#)

#### ▼ Handy Tools

- ◆ [DOD Acronym Finder](#)
- ◆ [Airbill Tracking](#)
- ◆ [CCSS Applications](#)
- ◆ [DRMS Search](#)
- ◆ [DLA Handbook](#)
- ◆ [NSN/Equipment Listing](#)
- ◆ [MRO Status Query](#)
- ◆ [DODAAC/RIC Lookup](#)

#### ▼ Supply & Maintenance Documents

- ◆ [Supply & Maint Bulletins](#)
- ◆ [Power Sources News](#)



*United States Army*

*Communications-Electronics Command  
Logistics and Readiness Center*

*Provides Team C4IEWS communications electronics logistical support for the U.S. Army*

Director

Mr. Anthony A. LaPlaca

### ● LRC News

Welcome to the new LRC Web Page. It's been totally redesigned and updated to meet the growing demand from you-- the users...

We appreciate your continued support of the LRC Home Page. These changes reflect comments and suggestions that we have received from you. As always, the goal is to provide you with the best home page possible, while allowing you to find the information and tools you need to do your job quickly and easily. Please send us your comments to the [LRC Web Team](#).

### ● Coming Soon--The LRC Intranet

The Intranet will allow us to provide even more timely and up-to-date

# ***LRC OPPORTUNITY BRIEFINGS***

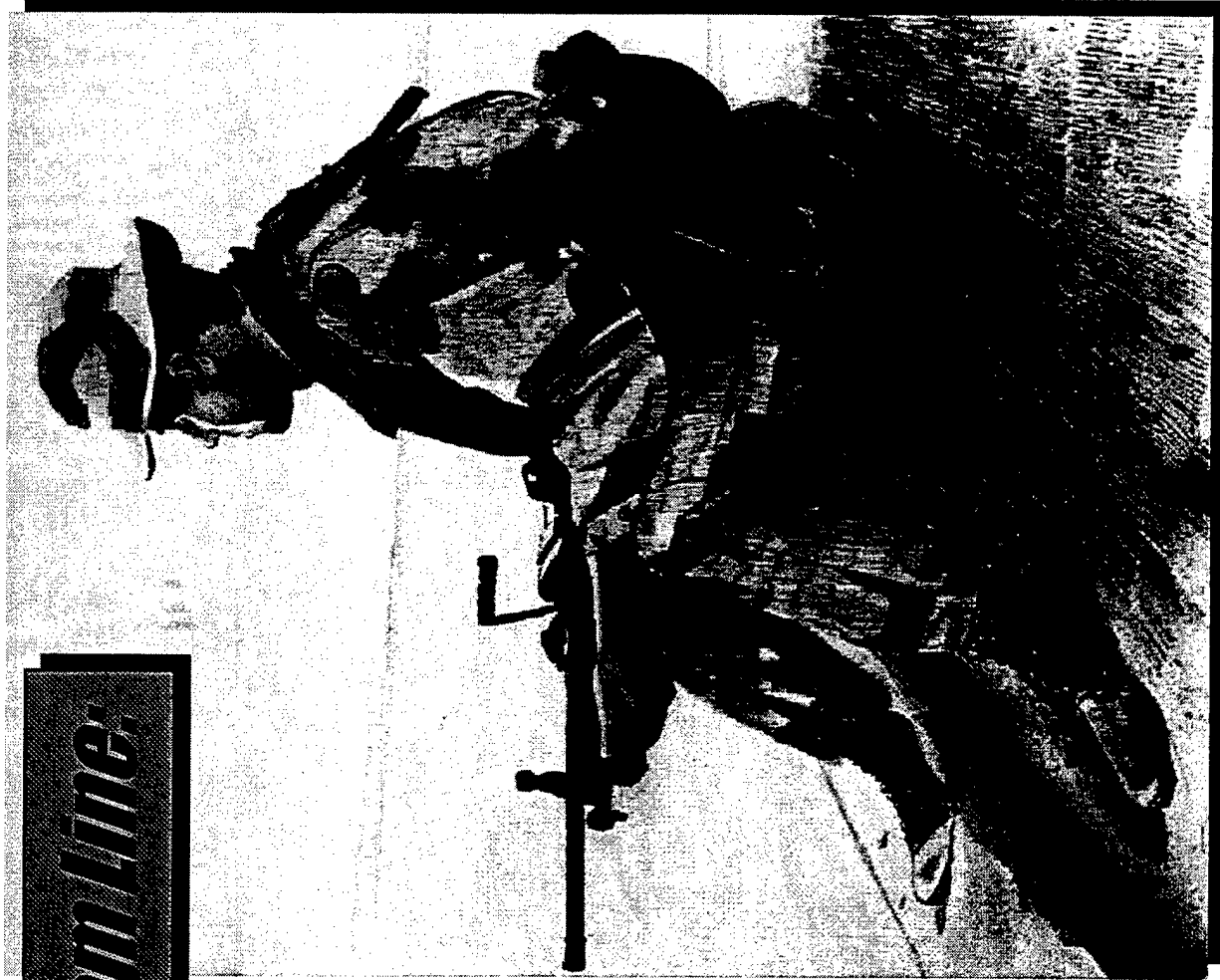
## **\* Business Functional Area Omnibus Contract**

- Edward Thomas**
- Omnibus Support Services**
  - Richard Riccelli**
- AN/VIC-3**
  - Charles Penta**
- Battery Acquisitions**
  - Ron Cialino**
- Improved ECU**
  - Charles Thompson**

## **\* PA&I Brief**



**GECON Bottom Line**





# NOTES

**BUSINESS FUNCTIONAL AREA  
OMNIBUS CONTRACT**

**MR. EDWARD C. THOMAS  
DIRECTOR, PLANNING, ANALYSIS  
AND INTEGRATION**

**UNCLASSIFIED**

## POINT PAPER

SUBJECT: Business Functional Area Omnibus Contract

1. Overview. The proposed subject contract addresses issues where additional support and expertise is needed to assist CECOM/Fort Monmouth decision-makers in assessing the risks, cost/benefits, economic effects and consequences of alternative public policy initiatives or regulatory actions. Topics deal with broad economic and public policy issues related to decisions on existing and future communications-electronics systems development strategies and resource allocation decisions, down to regulations impacting individual procedures. Many of the issues require local, national and international perspectives and have implications across all governmental organizations. Support in this area may be driven by regulatory and legislative requirements. When performed as an integral part of a task, work may require the contractor to plan and conduct workshops, conferences and training courses sponsored by CECOM/Fort Monmouth activities and to disseminate technical information developed under that task. The primary skill requirement of this functional area focuses on the following disciplines:

- (a) Cost Analysis
- (b) Fiscal Management
- (c) Program Analysis
- (d) Systems Analysis
- (e) Management Analysis

2. Contract Type: Indefinite Delivery/Indefinite Quantity (ID/IQ), Time-and-Materials (T&M)

3. Period of Performance: The contract is anticipated to start 28 October 1999 and end 27 October 2004 if all options are exercised.

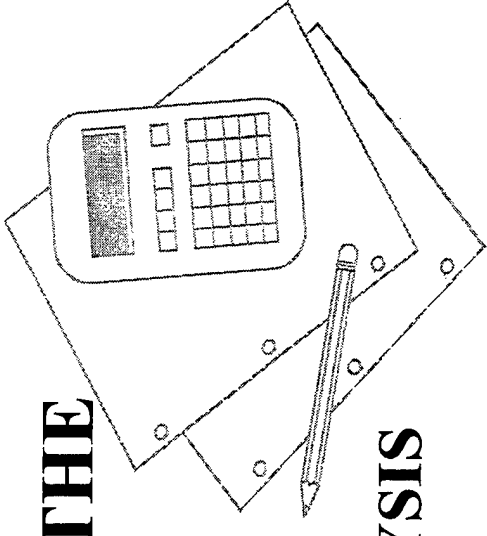
4. Points of Contact (POC):

- Acquisition POC: Mr. Joseph P. Brady  
AMSEL-AC-CB-C-BS  
Fort Monmouth, NJ 07703-5008  
(732) 532-5500  
FAX: (732) 532-1928

- Technical POC: Mr. George P. Guattare  
AMSEL-PE-FC  
Fort Monmouth, NJ 07703-5000  
(732) 532-3074  
FAX: (732) 532-6736

# DEFINITION

**BUSINESS FUNCTIONS INCLUDE THE FOLLOWING.....**

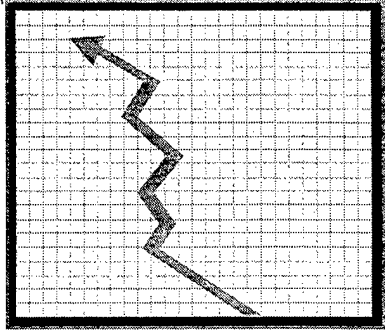


- **COST ANALYSIS**

- COST ESTIMATING AND ANALYSIS
- COST ESTIMATING UTILITIES
- SELECTED ACQUISITION INFORMATION  
AND MANAGEMENT SYSTEMS (SAIMS)

- **FISCAL MANAGEMENT**

- PROGRAMMATIC AND MANPOWER
- PROGRAMMATIC AND INTEGRATION
- BUDGET FORMULATION
- BUDGET EXECUTION



# DEFINITION



- **PROGRAM ANALYSIS**
  - FORMULATE PLANS
  - GUIDE ACQUISITIONS
  - MONITOR PROGRESS/TRENDS/SCHEDULES
- **SYSTEMS ANALYSIS**
  - LOGISTICS SUPPORT ANALYSIS
  - DECISION RISK ANALYSIS
  - WARRANTY COST EFFECTIVENESS
  - COST/BENEFIT OF ALTERNATIVES
- **MANAGEMENT ANALYSIS**
  - STUDIES
  - ORGANIZATION REVIEWS/REALIGNMENTS

# WORKLOAD HISTORY

## AND ESTIMATED REQUIREMENT

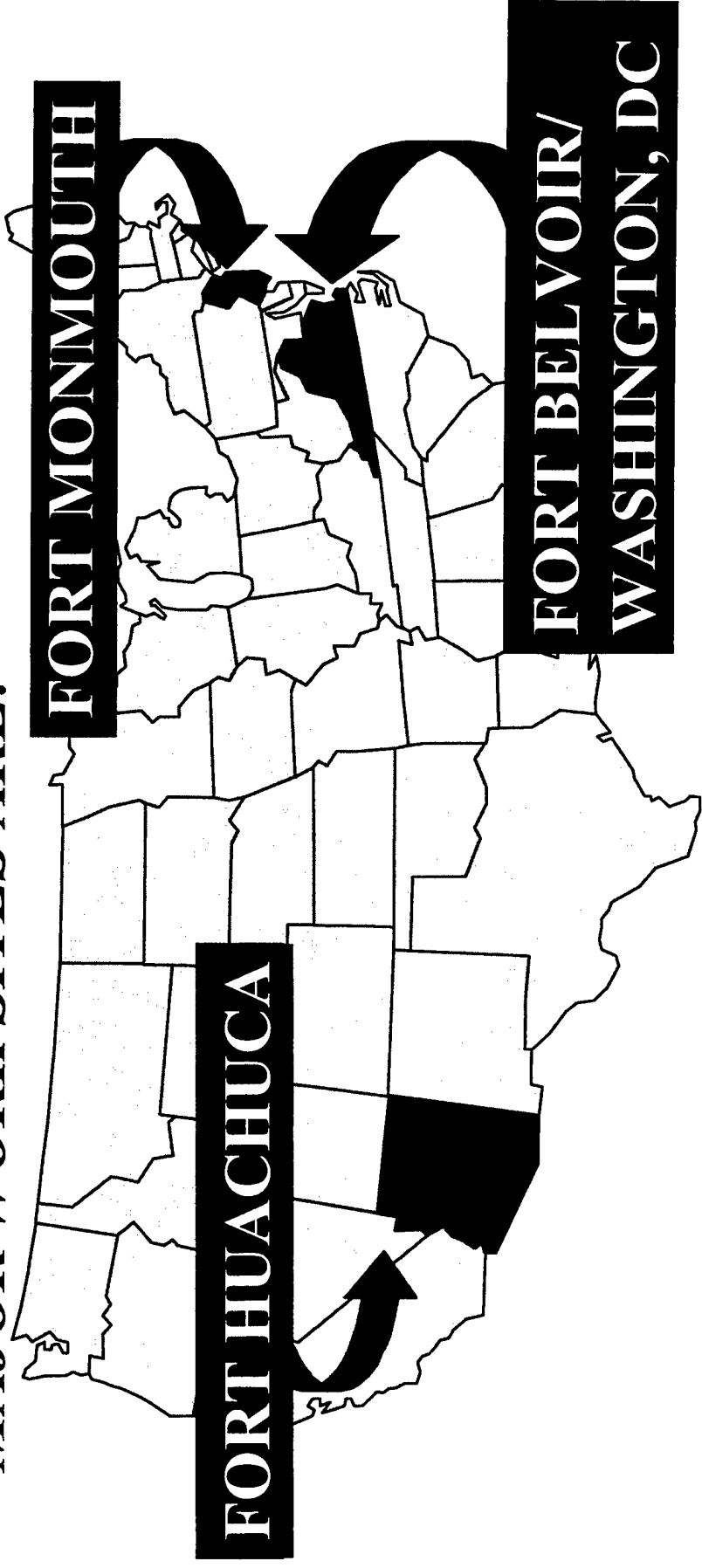
	WORKYEARS				TOTAL
	<u>FY95</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FUNDING</u>
SYS MGT CTR	5	13	22	23	\$6.372M
PA&I DIR	0	0	3	1	\$ .473M
LOG & READ CTR	6	5	5	3	\$1.784M
RD&E CTR	0	1	1	2	\$ .340M
PEO-C3S	10	10	17	15	\$5.186M
PEO-IEW&S	<u>7</u>	<u>16</u>	<u>25</u>	<u>6</u>	<u>\$5.451M</u>
TOTALS	28	48	70	50	\$19.606M

- WORKYEARS USED IN ALL BUSINESS FUNCTIONS
- FUTURE REQUIREMENTS - SAME LEVEL OR MORE

# WORK SITES

CECOM AND FT. MONMOUTH ACTIVITIES  
HAVE OPERATIONS WORLDWIDE.

*MAJOR WORK SITES ARE:*





## OTHER WORK/SITES

- ACTIVITIES OUTSIDE FT MONMOUTH HAVE USED THE CURRENT CONTRACT:

	<u>WORKYEARS</u>	<u>TOTAL FUNDING</u>
FY95	17	\$1.640M
FY96	15	\$1.504M
FY97	54	\$5.393M
FY98	<u>29</u>	<u>\$2.975M</u>
TOTAL	115	\$11.512M

EXAMPLES: US ARMY SIG CENTER & SCHOOL  
SOUTHERN COMMAND, US FORCES KOREA, ARMY  
MATRIEL COMMAND

# **CONTRACT OPPORTUNITY**

**TITLE: BUSINESS FUNCTIONAL AREA SUPPORT**

**OBJECTIVE: SUPPORT DECISION MAKERS IN THE  
BUSINESS ANALYSIS AREAS**

**CONTRACT TYPE PROPOSED: ID/IQ, T&M,  
(BEST VALUE), SBSA**

**KEY MILESTONE: RFP RELEASE ~2ND QTR FY99**

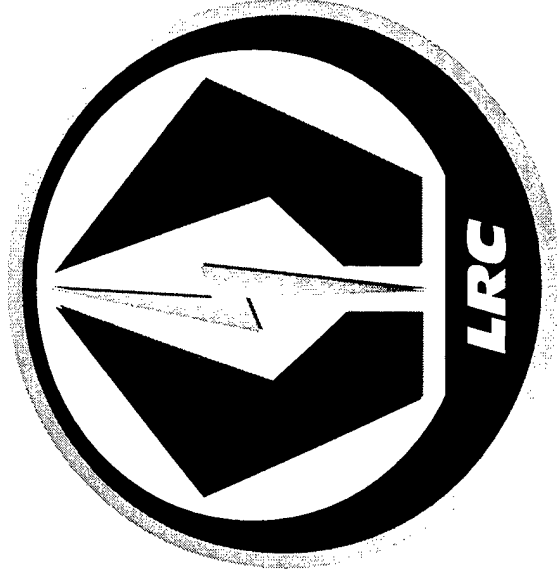
**EST VALUE: \$30 - \$50 MILLION**

**ACQUISITION POC: JOE BRADY (732) 532-5500  
TECHNICAL POC: GEORGE GUATTARE (732) 532-3633**



# NOTES

**OMNIBUS SUPPORT SERVICES FOR  
LOGISTICS AND READINESS CENTER**



**MR. RICHARD RICCELLI  
CHIEF, TECHNICAL POLICY & PROGRAMS BRANCH  
LEO DIRECTORATE**

**UNCLASSIFIED**

## POINT PAPER

SUBJECT: LRC OMNIBUS Support Services Acquisition

OBJECTIVE: To provide support services for the Logistics and Readiness Center (LRC) with a full range of life cycle integrated logistics, technical, engineering and administrative support pertaining to weapon system support and a full range of Total Package Fielding, New Equipment training and Electronic Sustainment Support, pertaining to readiness support. These services will also be available to any Command, Control, Communications, Computer, Intelligence, Electronic Warfare and Sensors (C4IEWS) activity or organization support.

## FACTS:

- \* This acquisition will replace the following LRC OMNIBUS contracts:

CONTRACTOR	EXPIRES
VENNTRONIX	2/00
INNOLOG	2/00
COBRO	2/00
MVP	8/99
ARINC	7/98
Nations (Readiness)	4/00
EPS (Readiness)	9/00

- \* Milestones listed below reflect the planned schedule for the LRC OMNIBUS effort:

Issue Solicitation	1QTR - FY99
Receive Proposals/ Start Evaluation	1QTR - FY99
Complete Evaluation	3QTR - FY99
Award Contracts	3QTR - FY99

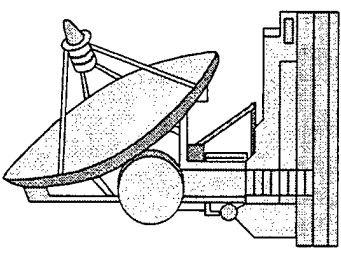
- \* For the weapon system support effort, there will be two Best Value, Time and Materials, Indefinite Delivery/Indefinite Quantity procurements. Two Small Business Set Aside contracts will be awarded with the same Statement of Work, with at least one (1) 8(A) award. For the readiness effort, there will be one Best Value, 8A Set Aside contract awarded. All contracts are planned to be awarded for one base year and four one year options.

BRIEFER: Mr. Richard Riccelli, Chief, Technical Policy and Programs Branch, Logistics and Engineering Operations Directorate, AMSEL-LC-LEO-E-EP, (732) 532-8911.

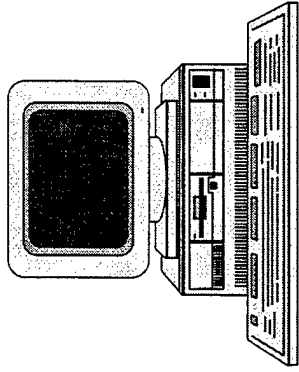
RICHARD A. RICCELLI  
Chief, Technical Policy and Programs Br  
Logistics and Engineering Operations Dir



# **LRC OMNIBUS SUPPORT SERVICES PROGRAM DEFINITION**



- Omnibus contractual support services for CECOM Logistics & Readiness Center (LRC)
- Separated into two areas:
  - Weapon System support
  - Readiness support



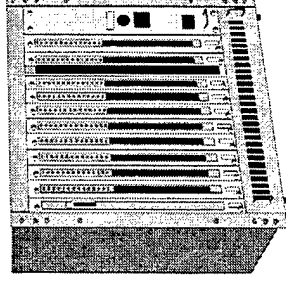
**LRC OMNIBUS SUPPORT SERVICES  
PROGRAM DEFINITION (Continued)**

<b>Equipment Life Cycle</b>				
<b>Acquisition Phase</b>			<b>Sustainment Phase</b>	
<b>CONCEPT EXPLORATION</b>	<b>PROGRAM DEFINITION &amp; RISK REDUCTION</b>	<b>ENGR &amp; MFG DEV</b>	<b>PRODUCTION FLDG/DEPLOY</b>	<b>OPERATIONAL SPT</b>
			<b>DISPOSAL</b>	

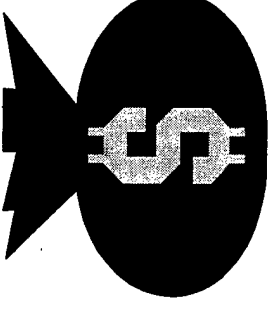
**Perform full spectrum of logistics support  
across the entire life cycle**

# **LRC OMNIBUS SUPPORT SERVICES WEAPON SYSTEM SUPPORT**

- **Integrated Logistics Support**
- **Engineering**
  - **Production**
  - **Maintenance**
  - **General**



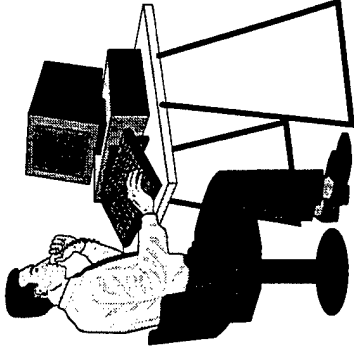
- **Product Quality Management**



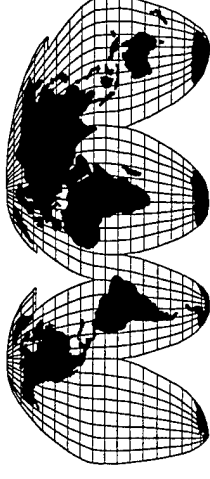
- **Value Concepts -  
Life Cycle Cost Reduction  
MTS/OSCR**



# **LRC OMNIBUS SUPPORT SERVICES WEAPON SYSTEM SUPPORT (CONTINUED)**



- Life Cycle Maintenance
- Test Program Sets
- Sample Data Collection
- General Supply Management
- Foreign Military Sales Support
- Force Modernization
- Training
- General Process/program Support



# **LRC OMNIBUS SUPPORT SERVICES**

## **LABOR CATEGORIES**

### **WEAPON SYSTEM SUPPORT**

Program Manager	Quality/RAM Engineer
Project Manager	Engineering Intern
Site Manager	Value Engineer
Senior/Junior Engineer	Project Engineer
Logistics Engineer	Engineering Technician
Production Engineer	Parts Lister
Electronics Engineer	Logistics Analyst
Mechanical Engineer	Systems Analyst
Software Engineer	Cost Analyst

# **LRC OMNIBUS SUPPORT SERVICES LABOR CATEGORIES (Continued)**

## **WEAPON SYSTEM SUPPORT**

EMI/EMC Associate Engineer/EMI/EMC Electronic

Engineer

Senior Logistician/Logistician

Senior Management Specialist/Management Specialist

Senior Analyst/Programmer

Cost Analyst

Senior Program Budget Analyst/Program Budget  
Analyst

Senior Equipment Specialist/Equipment Specialist

Senior Technical Writer/Editor/Technical Writer/Editor

Technical Illustrator

# **LRC OMNIBUS SUPPORT SERVICES LABOR CATEGORIES (Continued)**

## **WEAPON SYSTEM SUPPORT**

Electronic Publishing Specialist

Word Processor/Data Entry Operator

EMI/EMC Technician

Quality Assurance Specialist

Standardization Specialist

Senior Configuration Mgt Spec/Configuration Mgt Spec

Senior Electronics Technician/Electronics Technician  
Technician

Senior Supply Technician/Supply Technician/Supply Clerk  
Computer Scientist

Senior Computer Programmer/Computer Programmer

# **LRC OMNIBUS SUPPORT SERVICES**

## **LABOR CATEGORIES (Continued)**

### **WEAPON SYSTEM SUPPORT**

Senior Inventory Specialist/Inventory Specialist/Inventory Specialist Assistant

Packaging Specialist

Theater Coordinator

Freight Classification Specialist

Field Supervisor

Traffic Management Specialist

Field Monitor

Senior Research Specialist

Roving Field Monitor

Research Specialist

Statistician

Senior Draftsman/Draftsman

Data/Project Qual Ctl Spec


Training Instructor

Photographer

Administrative Assistant

Clerical

# **LRC OMNIBUS SUPPORT SERVICES READINESS**

- **Total Package Fielding (TPF)**
- **New Equipment Training (NET)**  

- **Electronic Sustainment Support Centers (ESSCs)**

# **LRC OMNIBUS SUPPORT SERVICES**

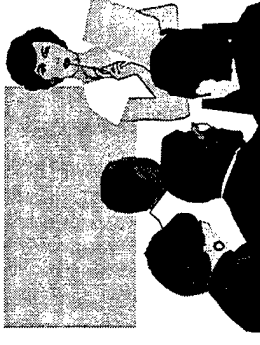
## **LABOR CATEGORIES (Continued)**

### **READINESS SUPPORT**

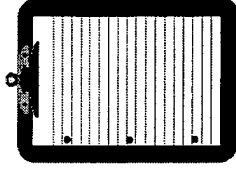
Project Supervisor	Electronics Tech/Maint Jr.
Senior Log Mgmt Spec	General Supply Specialist
Log Mgmt Spec	Program Analyst
Sup Sys Analyst	Supv Equipm Spec
Programmer	Equip Spec Elec
Jr. Sup Tech	Jr. Instructor
Sr. Sup Tech	Sr. Instructor
Illustrator	Electronics Tech/Maint III
Sr. Gen Sup Spec	Electrical Engineer

# **LRC OMNIBUS SUPPORT SERVICES**

## **PROGRAM STATUS**



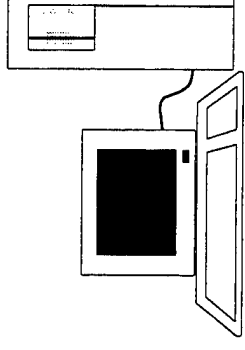
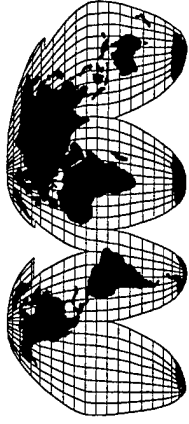
- Acquisition plan in approval cycle
- SOW being prepared
- Evaluation plan being prepared
- Sample tasks being created
- Acquisition requirements package preparation in process
- Sections L & M being prepared
- Draft solicitation/SOW on the web - 4QTR - FY 98
- Solicitation to be issued 1QTR - FY 99





# **LRC OMNIBUS SUPPORT SERVICES PROGRAM REQUIREMENTS**

- **All contractor employees must obtain and maintain an appropriate security clearance commensurate with the level of classified materiel to which access is required.**
- **May require top secret clearance and controlled cryptographic item access**



# **LRC OMNIBUS SUPPORT SERVICES CONTRACT OPPORTUNITIES**

**TITLE:** LRC Omnibus Support Services

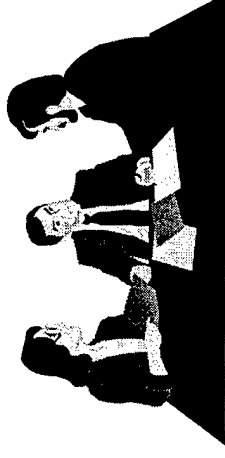
**OBJECTIVE:** Weapon System oriented support

**PROPOSED CONTRACT TYPE:** 100% Small Business Set  
Aside, Multiple Awards (2), at least one 8(A) award; Best  
Value; ID/IQ; T&M DOS; One Base Year, Four One Year  
Options

## **KEY MILESTONES:**

Projected RFP                      1QTR - FY99

Projected Award                3QTR - FY99



## **ESTIMATED VALUE:**

\$ 400M - \$500M (4000 - 5500 Manyears)

**TECHNICAL POC:** RICHARD RICCELLI (732) 532-8911

**CONTRACT POC:** DENNIS ALLEN (732) 532-2197

# LRC OMNIBUS SUPPORT SERVICES CONTRACT OPPORTUNITIES

**TITLE:** LRC Omnibus Support Services

**OBJECTIVE:** Readiness oriented support

**PROPOSED CONTRACT TYPE:** 8A Set Aside; Single Award;  
Best Value; T&M DOs; One Base Year, Four One Year  
Options

## **KEY MILESTONES:**

Projected RFP

1QTR - FY99

Projected Award

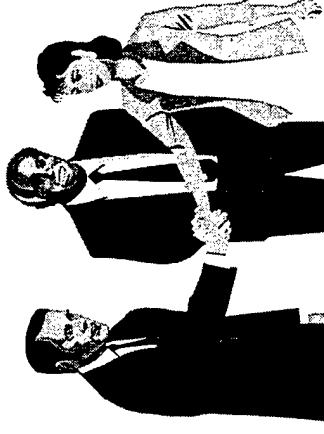
3QTR - FY99

## **ESTIMATED VALUE:**

\$ 200M - \$300M (2000 - 3000 Manyeears)

**TECHNICAL POC:** CATHERINE SPALDING (732) 532-1256

**CONTRACT POC:** JANE CALICARI (732) 532-2819





# NOTES

# AN/VIC-3 Solicitation



**CHARLES PENTA**

**Chief**

**Vehicular Intercom System (VIS)  
Special Project Office (SPO)**

**LRC**

**Unclassified**

## POINT PAPER

SUBJECT: APBI Brief

OBJECTIVE: The AN/VIC-3 (VIS, Vehicular Intercom System) solicitation is an acquisition of major component parts and sustainment parts of the VIS. It will be accomplished by a 5-year range quantity, multi-year, split-awards contract. Solicitation release will be in Dec 98.


## FACTS:

- \* The VIS program was transitioned to the VIS SPO, LRC in Sep 1996.
- \* The VIS is an intercom and radio access communications system, primarily for crewmembers of combat vehicles. It consists of a Master Control Station (MCS), Full Function Crew Station (FFCS), Monitor Only Station (MOS), Radio Interface Terminal (RIT), Active Noise Reduction (ANR) headsets, and power signal cables.
- \* The Major component parts such as the MCS, FFCS, RIT and various headsets will be procured and accepted using performance specifications.
- \* First Article Testing is required and may be waived for the original manufacturers.
- \* Milestones listed below reflect the planned schedule for the AN/VIC-3 solicitation. All schedules are planned to accomplish the final goal of setting up a contract to provide sustainment parts and initial fielding spares.

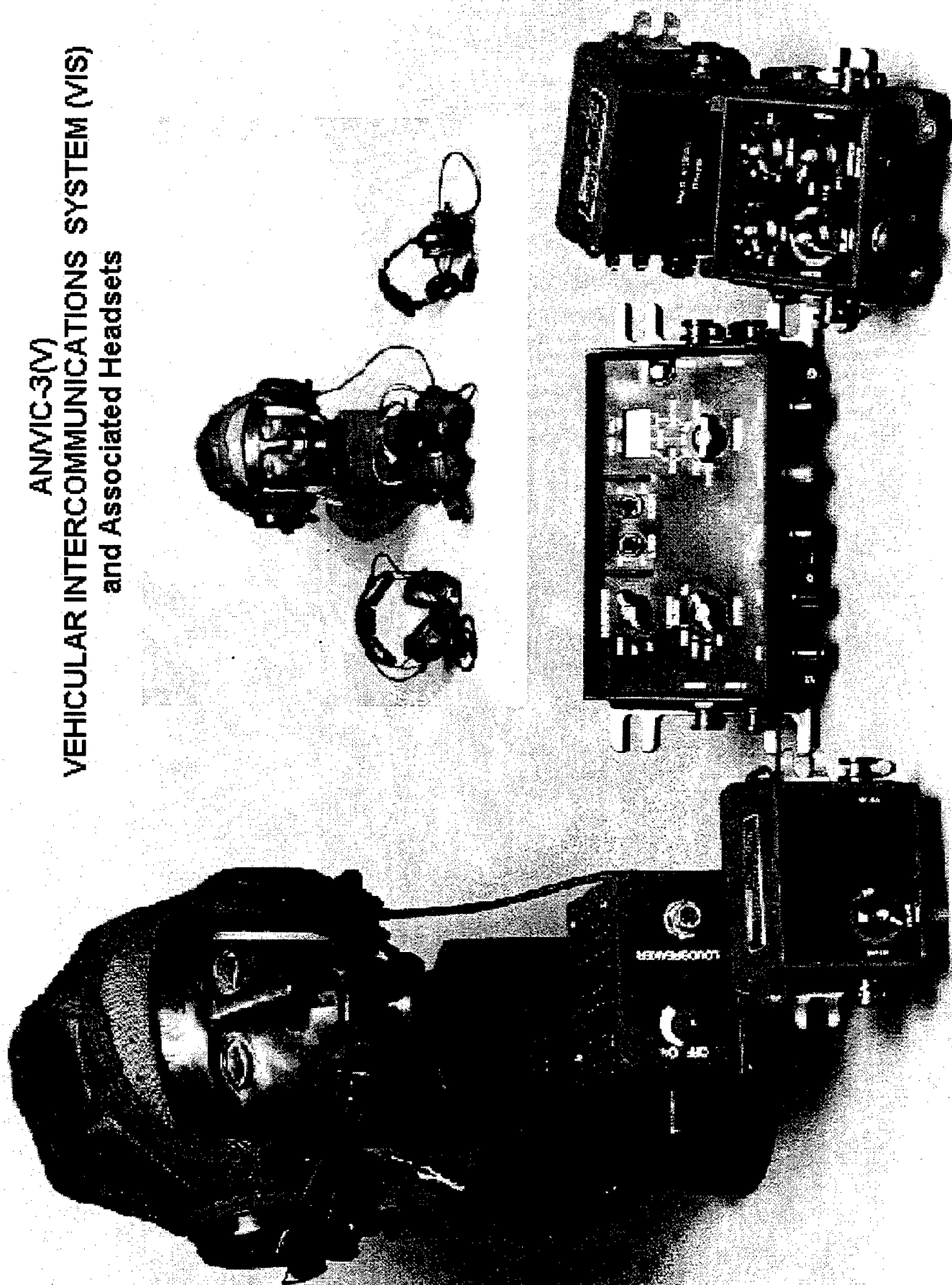
** Draft Solicitation Release	4 <sup>TH</sup> QTR - FY98
** Solicitation Release	1 <sup>ST</sup> QTR - FY99
** Proposal and Bid Samples	2 <sup>ND</sup> QTR - FY99
** Contract Award	3 <sup>RD</sup> QTR - FY99
** Option Award	3 <sup>RD</sup> QTR - FY2004

\* This will be a Firm-Fixed Price, Range quantity procurement. It will be a Best Value evaluation with possible split awards. The contract is planned to run five years for ordering with five option years, each which can be exercised independently. The estimated value will be \$ 32-67M for sustainment and \$ 16-40M for new systems.

BRIEFER: Mr. Charles Penta, Branch Chief, VIS SPO, Tactical Radio Division, COMM Directorate, LRC. AMSEL-LC-COM-R-VI, (732) 532-9204.

  
MARY F. RUSCAVAGE  
DIRECTOR COMMUNICATIONS  
(732) 532-5762

AN/VIC-3(V)  
VEHICULAR INTERCOMMUNICATIONS SYSTEM (VIS)  
and Associated Headsets



# **AN/VIC-3 Solicitation**

## **System Description**

**The AN/VIC-3(V), Vehicular Intercommunication System (VIS), is designed to provide the commander and crew members of the Army's fleet of combat and combat service support vehicles with a high reliability, noise free digital intercom and radio access communication system.**



# **AN/VIC-3 Solicitation**

**The Major components in the AN/VIC-3 are:**

- **Master Control Station (MCS)** - allows for programming of radios to crew members, radio listening silence, connection to field phone or other vehicle, and connection to two combat radios
- **Full Function Crew Station (FFCS)** - provides volume adjustment and radio selection
- **Radio Interface Terminal (RIT)** - used for applications where three to six radio capability is required
- **Monitor Only Station (MOS)** - provides volume adjustment only
- **Loudspeaker (LS)** - receives only analog audio and enables crewmembers, without headsets to monitor intercom and /or radio traffic.

# **AN/VIC-3 Solicitation**

- **Various Headsets, such as**
  - **H-374 Combat Vehicle Crew (Passive Noise Reduction, PNR/Active Noise Reduction, ANR)**
  - **H-364 COMMAND & CONTROL (with unique microphone)**
  - **H-365 Communication Aural Protective System, CAPS (PNR/ANR TYPE I, no microphone)**
  - **H-366 CAPS (PNR/ANR TYPE II, with M-172 microphone)**
  - **H-370 PM SOLDIER ACAPS (PNR TYPE B, with M-173 microphone)**

# **AN/VIC-3 Solicitation**

## **System and Sustainment Cost**

- Existing contract will have provided approximately 12,000 systems to date.
- Over a 8 - 10 year period, this solicitation and contract(s) will provide an additional 3,000 systems.
- Sustainment cost from this solicitation and contract(s) is anticipated to total approximately \$ 5-7 million annually.
- The production deliveries from this contract will coincide with the end of deliveries from the existing contract.

# **AN/VIC-3 Solicitation**

## **Program Definition**

- **A 5 year range quantity, Best Value award(s), firm fixed price requirement type contract(s) (NDI)**
- **In addition, 5 option years if approval is obtained, each of which can be exercised independently**
- **Major components and sustainment items (spares) will be procured**
- **Separate awards (Split Awards) of individual Contract Line Item (CLIN) will be considered**
- **First Production to commence in FY 2001**

# **AN/VIC-3 Solicitation**

## **Program Requirement**

- **First Article Testing is required for the major components**
- **First Article Testing Waiver may be provided to previous manufacturers**
- **The delivered products must meet the requirements cited in the performance specifications**
- **Performance specifications for Major Components**
- **Production drawings may be provided for information only**
- **Interchangeability with existing system will be a firm contractual requirement and demonstrated during proposal evaluation**

# **AN/VIC-3 Solicitation**

## **Milestones**

- **Industry review of performance specs - June 98**
- **Comments due - Aug 98**
- **Industry review of Draft solicitation - Sept 98**
- **Solicitation release - Dec 98**
- **Proposal and Bid Samples - Jan 99**
- **Five Year Contract Award - Apr 99**
- **Single year Option Award - Apr 04**

# AN/VIC-3 Solicitation

## Contract Opportunity

**TITLE:** AN/VIC-3 Solicitation

**OBJECTIVE:** Provide a stable production base for additional fielding and sustainment

**PROPOSED CONTRACT TYPE:** Firm Fixed Price, Range quantities, Separate awards (Split Awards) of individual Contract Line Item (CLIN) will be considered

**KEY MILESTONES:** See previous slide

**ESTIMATED VALUE:** \$ 32 - \$ 67 Million dollars for sustainment (FY01-FY09), \$ 16 - \$ 40 Million dollars for new systems (FY01-FY09)

**TECH POC/TEL #:** CHIT LEE (732) 532-9622

**CONTRACT POC/TEL #:** RACHEL BOGNER (732) 427-1529



# NOTES





# **COMMUNICATIONS- ELECTRONICS RECHARGEABLE BATTERY ACQUISITION**

**RONALD CIALINO  
CHIEF**

**LRC POWER SOURCES TEAM**

**UNCLASSIFIED**

26 MARCH 1998

## POINT PAPER

SUBJECT: The goal of the Rechargeable Battery Omnibus is to provide state of the art rechargeable communications-electronics batteries and family chargers. These batteries and chargers will support the Army's continuing transition away from non-rechargeable batteries, as well as requirements from the USMC, Navy, Air Force and other DoD agencies.

## FACTS:

- The following battery configurations are expected to be included in this acquisition; BB-X90, BB-2847, BB-X88, BB-X16, BB-503, BB-X800 and BB-X600.
- A family of battery charger configurations will be include. Members of this family include chargers for use in rear echelon (i.e. bench top) locations, vehicular mounted (ruggedized) and manportable (ruggedized and for use in remote locations)
- All batteries and chargers must be compatible with items currently in the CECOM inventory
- Performance specifications will be utilized for all items
- Milestones listed below are the current best estimates:

• Release draft specification	4th. QTR - FY98
• Release draft solicitation	1st. QTR - FY99
• Release RFP	2nd. QTR - FY99
• Contract Award	1st. QTR - FY00
- This will be a Firm-Fixed-Price, Indefinite Delivery/Indefinite Quantity procurement. It will be a Best Value evaluation with the potential for teaming. The contract is planned to cover a 5 year ordering period, and Direct Vendor Delivery is projected.

BRIEFER: Mr. Ronald Cialino. Chief, C4ILRC Power Sources Team, AMSEL-LC-BT, (732) 532-2411.

Product Manager  
Donald Brockel  
Power Sources Team  
(732) 532-4948

# **PROGRAM/SYSTEM DESCRIPTION**

- Acquisition of a family of rechargeable batteries used in portable electronics equipment
  - Nickel-Cadmium, Nickel Metal Hydride, Lithium Ion
- Universal Battery Charger
- Interface Adapters/Cables

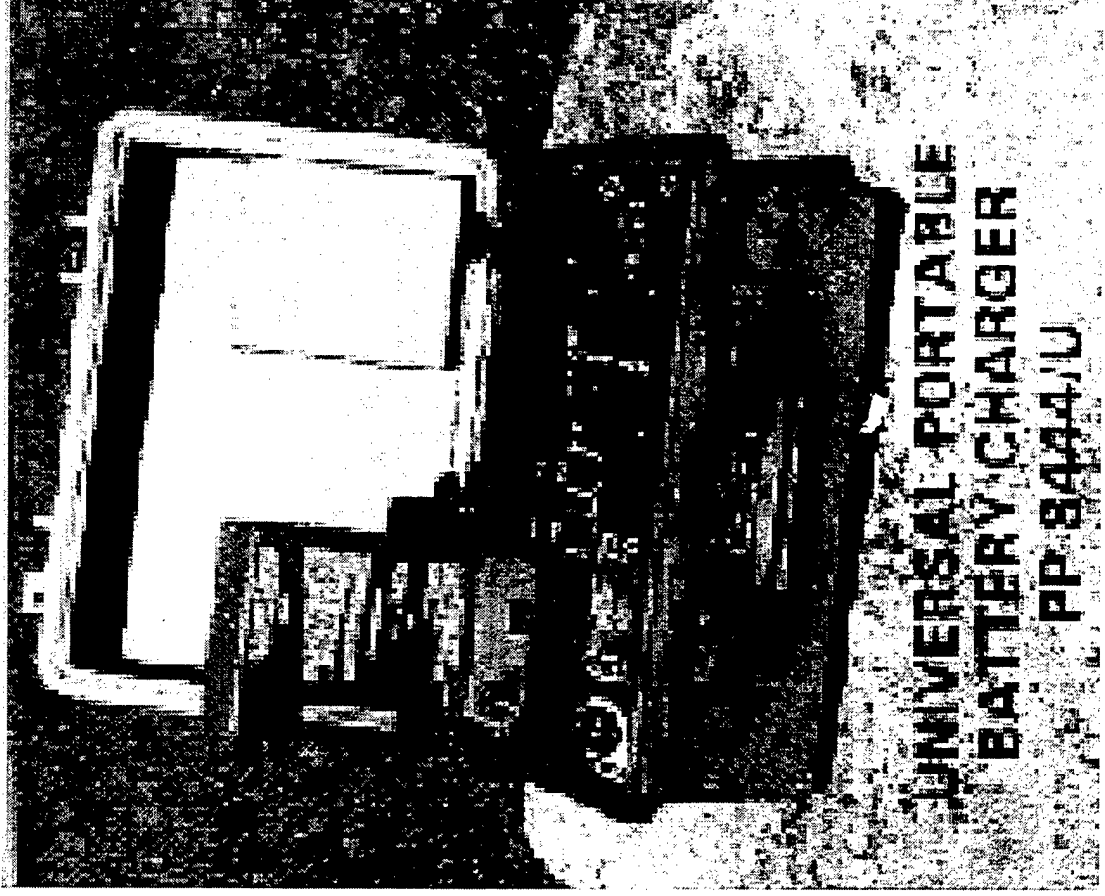
# PROGRAM/SYSTEM

Battery Type	Application
BB-X90	SINCGARS
BB-X88	PRC-126 RADIO
BB-X16	MELIOS
BB-503	TAS-5
BB-2847	Thermal Weapon Sight
	LANDWARRIOR
BB-X800	PLGR
BB-X600	PSC-3

# **PROGRAM/SYSTEM**

- **Battery Charger:**
  - **Compatible with existing PP-8444A**
  - **Charges 2 or more batteries simultaneously**
  - **Operates on 110/220 VAC; 24 VDC**
  - **Capable of charging new batteries through software update**

# PROGRAM/SYSTEM



# **STATUS OF PROGRAM/SYSTEM**

- **Rechargeables:**
  - **BB-X800 and BB-X600 under development**
  - **Other batteries and charger on production contract through FY99**

# PROGRAM/SYSTEM REQUIREMENTS

Battery Type	Yearly Requirements
BB-X90	5922
BB-X88	1845
BB-X16	3321
BB-503	1548
BB-2847	720
BB-X800	TBD
BB-X600	TBD
Charger	207



# CONTRACT OPPORTUNITIES

**TITLE:** Rechargeable Battery Omnibus

**OBJECTIVE:** Obtain state of the art batteries and chargers

**PROPOSED CONTRACT TYPE:** 5 Year IDIQ, FFP, Best

Value

## **KEY MILESTONES:**

Release Draft Specification	4QFY98
Release Draft Solicitation	1QFY99
Release RFP	2QFY99
Contract Award	1QFY00

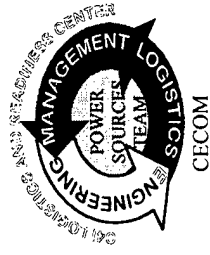
**ESTIMATED VALUE:** \$12-20M

**TECH POC/TEL #:** DON BROCKEL (732) 532-4948

**CONTRACT POC/TEL #:** BOB REAGAN (732) 532-1983



# NOTES



# AIRCRAFT BATTERY ACQUISITION

RONALD CIALINO  
CHIEF

LRC POWER SOURCES TEAM

UNCLASSIFIED

## POINT PAPER

SUBJECT: The Aircraft Battery Omnibus is an acquisition to for the replenishment of the following aviation batteries items: BB-432B/A, BB-664 batteries and harnesses and BB-716 cells.

## FACTS:

- The following items are expected to be included in this acquisition; BB-432B/A, BB-664 battery, BB-664 harness, and cells for the BB-716
- All batteries and chargers must be compatible with items currently in the CECOM inventory
- Performance specifications will be utilized for all items
- Milestones listed below are the current best estimates:

• Release solicitation	3QFY98
• Release RFP	3QFY98
• Contract Award	4QFY98
- This will be a Firm-Fixed-Price, Indefinite Delivery/Indefinite Quantity procurement.

BRIEFER: Mr. Ronald Cialino. Chief, C4ILRC Power Sources Team, AMSEL-LC-BT, (732) 532-2411.

Product Manager  
Deborah Carpenter  
Power Sources Team  
(732) 532-8815

# **PROGRAM/SYSTEM DESCRIPTION**

- All batteries/cells are vented Nickel-Cadmium design
- Cells are packages of 19 (except BB-716 low capacity cell)
- One performance specification will define all items

# **PROGRAM/SYSTEM**

- **Aircraft Batteries and Components:**
  - **BB-432B/A Battery and Cells (CH-47D Chinook)**
  - **BB-664/A Harness (AH-64 Apache)**
  - **BB-476/A Battery (OH-58A/B/C KIOWA)**
  - **BB-716/A Cells (UH-60 Blackhawk)**
  - **BB-649 Battery and Cells (AH-1 Cobra)**

# **STATUS OF PROGRAM/SYSTEM**

- **NO present production contracts in place for these items**
- **Management scheduled to transfer to Defense Logistics Agency (DLA) in Sep 99 (Apache items to Prime Vendor Support in Sep 98)**
  - **CECOM to fill supply pipeline**
  - **Possible transfer of contract to DLA**

# PROGRAM/SYSTEM REQUIREMENTS

Item	Minimum Requirements
BB-599 Cells	90
BB-432B Battery	235
BB-664 Harness	280
BB-716 Reg Cap Cells	2205
BB-716 Lo Cap Cells	384
BB-476 Battery	85
BB-648 Cell	84
BB-649 Battery	41



# CONTRACT OPPORTUNITIES

**TITLE:** Aircraft Battery Omnibus

**OBJECTIVE:** Replenishment of BB-432B/A, BB-664  
Harness, BB-476/A, BB-716/A Cells

**PROPOSED CONTRACT TYPE:** 3 Year IDIQ, FFP

## **KEY MILESTONES:**

Release Draft Specification	3QFY98
Release RFP	4QFY98
Contract Award	1QFY99

**ESTIMATED VALUE:** \$1-2 M

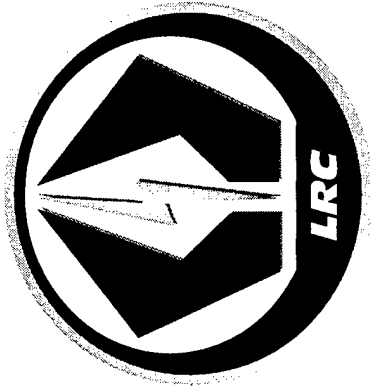
**TECH POC/TEL #:** RICH SCARINZI (732) 532-1925

**CONTRACT POC/TEL #:** BOB REAGAN (732) 532-1983



# NOTES

**IMPROVED ENVIRONMENTAL  
CONTROL UNITS (IECU)**



**CHARLES W. THOMPSON  
CHIEF, GROUND SUPPORT  
ENVIRONMENTAL DIVISION**



**CECOM  
LOGISTICS READINESS CENTER  
CCS/AVIONICS DIRECTORATE**

**UNCLASSIFIED**

23 Mar 98

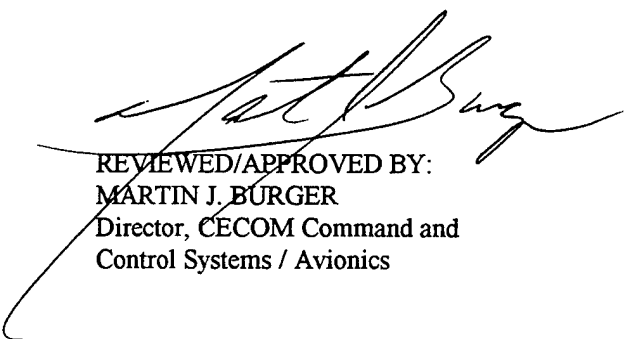
## POINT PAPER

SUBJECT: Army Improved Environmental Control Unit (IECU) Procurement

OBJECTIVE: The IECU acquisition replaces the standard family of environmental control units with an improved version that meets statutory and policy guideline for the elimination of Ozone Depleting Contaminant (ODC).

## FACTS:

1. The army has over 9,500 authorized environmental control units deployed worldwide. The army standard family of environmental control units is comprised of 8 configurations that range in capacity from 6,000 BTUH to 60,000 BTUH. These units rely on R-22 Refrigerant for operation which is a Class II ODC. There is no known zero ozone depleting refrigerant that can replace R-22 that is compatible with army's environmental control units due to different temperature, lubrication and compression characteristics of the current air conditioner design.
2. DOD policy for environmental control activities is derived from various national laws and international agreements. AR 200-1, Environmental Protection and Enhancement, identifies the requirement to "develop, fund, implement, and maintain plans to eliminate procurement, use, and emissions of Class II ODCs". Although no deadline is offered in the regulation for completion of the actions statutory restrictions on production of Class II ODCs will go into effect on January 1, 2010 and a statutory ban on production and consumption goes into effect on January 1, 2020. An additional impact is contained in the Final Governing Standards for Germany which accelerates restrictions by not allowing introduction into Germany of products containing Class II ODCs that are manufactured after 1 January 2000.
3. In a February 1994 Operational Requirements Document TRADOC identified the need for an Improved Environmental Control Unit containing zero ODCs. CECOM has identified in the current POM build the funding necessary to acquire improved environmental control units over the normal attrition cycle of the existing standard family of environmental control units.
4. A best value contract award for evaluation prototypes is planned for 1QFY00. Production quantities will be awarded in 1QFY02. A long term ID/IQ contract is planned for production quantities. The total value of this contract opportunity is \$150M - \$170M.
5. BRIEFER: Mr. Charles W. Thompson, Chief, Ground Environmental Support Division, AMSEL-LC-CCS-G, 703/704-2046.

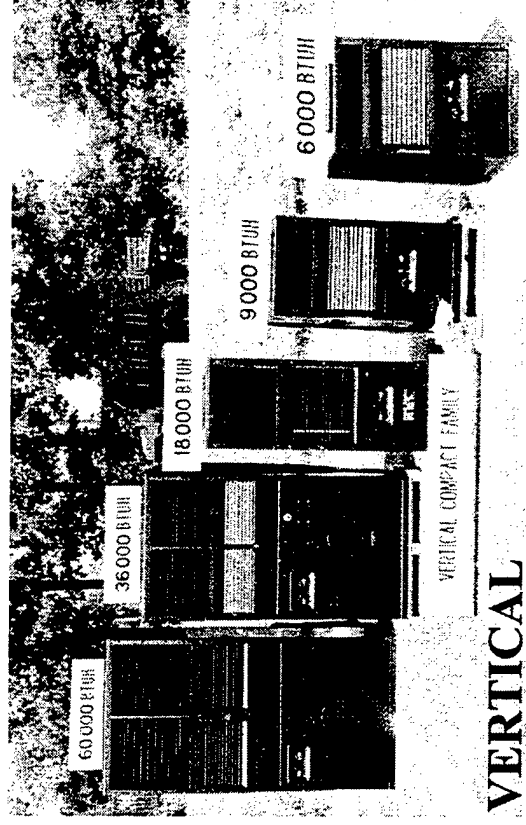


REVIEWED/APPROVED BY:  
MARTIN J. BURGER  
Director, CECOM Command and  
Control Systems / Avionics

# IECU

1967	DA Env. Control Policy Memorandum
1986	Technology Insertion
1987	Montreal Protocol
1990	Clean Air Act Amendments
1992	Final Governing Standards
1994	Operational Req. Document
1997	AR 200-1 Env. Protection & Enhancement
2000	Program Initiation
2010	Class II ODC Freeze
2020	Class II ODC Ban

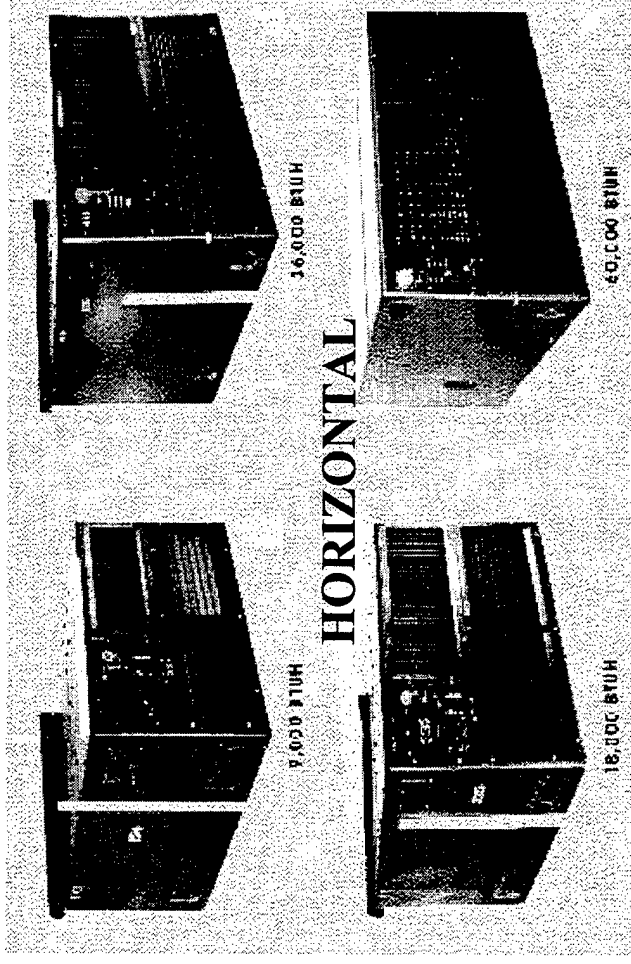
# IECU



## CHARACTERISTICS

- Horizontal & Vertical Configurations
- 9, 18, 36, & 60K BTUH cooling capacity
- 7, 14, 31, & 47K BTUH heating capacity

# IECU

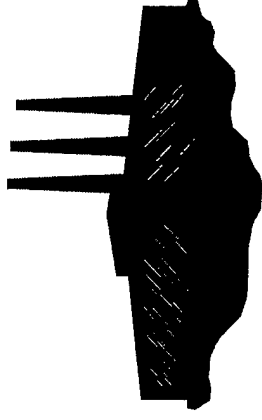


## CAPABILITY IMPROVEMENTS

- Multiple Power Input  
(One electrical version per size)
- Reduced Noise (65 Vs. 74 dBA)
- Improved Reliability (2300 Vs. 800 Hr)
- Operates from -50° to 125°F ambient temp.

# IECU

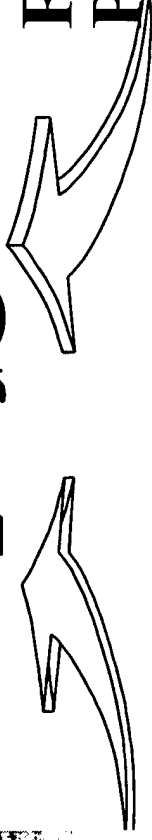
DEVELOPMENT



INDUSTRY

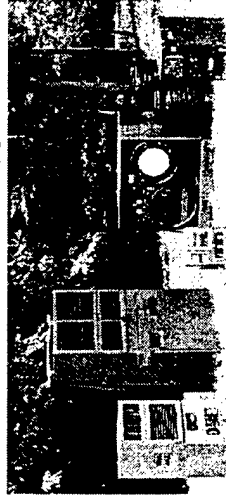


LOW RATE  
INITIAL  
PRODUCTION



FULL RATE  
PRODUCTION

STD. SETS



Power As Independent Variable Reviews

Cost As Independent Variable Reviews

REQMTS

TEST

FIELDING



# **IECU**

## **BEST VALUE**

- **Open systems architecture**
- **Cost As Independent Variable**
- **Technology opportunities**
  - **Power efficiencies**
  - **“Zero” ODC refrigerants**
  - **Built in diagnostics**
  - **Multiple power input**
- **Competitive unit prices**
- **Logistics supportability**
- **Minimum production lead times**

# CONTRACT OPPORTUNITIES

**TITLE:** Improved Environmental Control Unit

**OBJECTIVE:** Provide a new family of IECUs compliant with ODC restrictions

**PROPOSED CONTRACT TYPE:** Best Value (Eng Dev) [Select 2] with follow on IDIQ [Downselect to 1] for Production

**KEY MILESTONES:**

Draft Specification/SOW	2QFY99
Release RFP	3QFY99
Initial contract award	1QFY00
Downselect (Production)	1QFY02

**ESTIMATED VALUE:** \$150M - \$170M over 10 Yrs

**TECH POC/TEL #:** JOHN HEAVEY (703) 704-2149

**CONTRACT POC/TEL #:** STEVEN ALKINO (703) 325-3356



# NOTES

# SESSION III

**U.S. ARMY**  
**COMMUNICATIONS - ELECTRONICS COMMAND**  
**RESEARCH, DEVELOPMENT & ENGINEERING CENTER**



**Mr. Eugene Famolari**  
*Associate Technical Director*

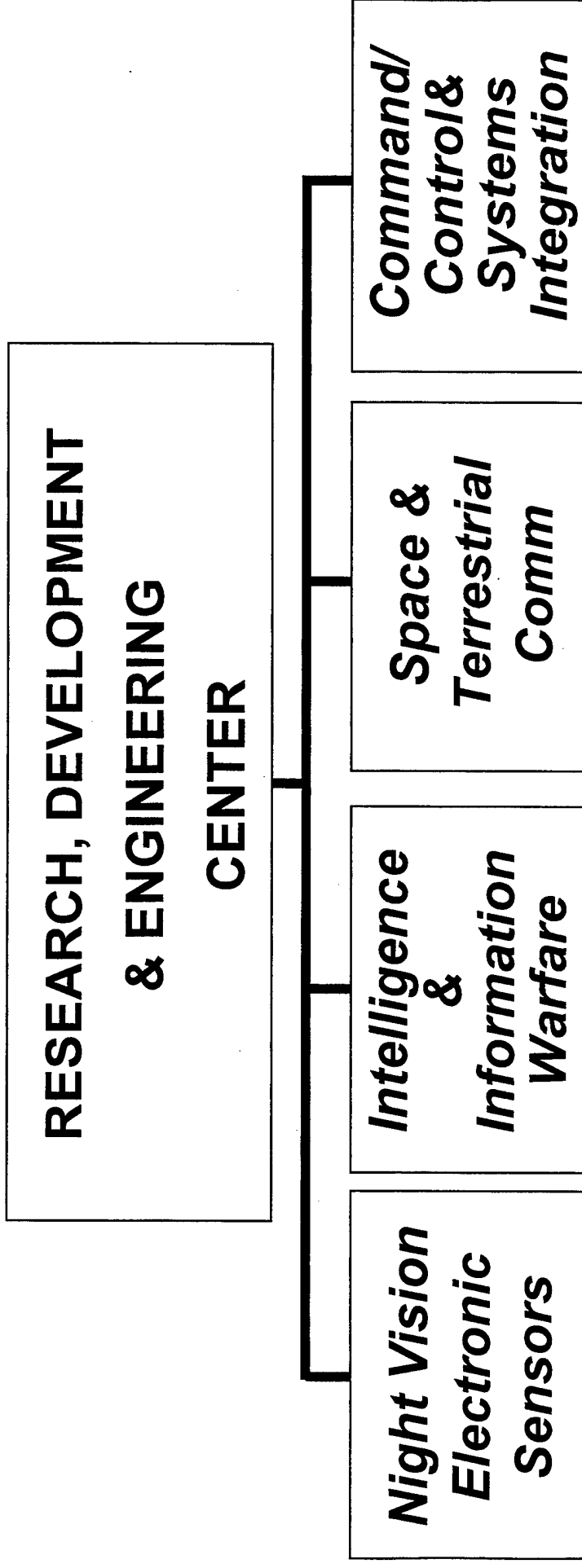
Unclassified

# **RDEC MISSION**

**The CECOM Research, Development and Engineering Center, is the AMC Center for research, development and engineering in:**

- ★ Communications, Command and Control, Computers and Intelligence (C4I)**
- ★ Information Warfare/Information Operations**
- ★ Electronic Warfare**
- ★ Night Vision and Electro-Optics**
- ★ Countersurveillance**
- ★ Countermine**
- ★ Power Sources and Low Power Electronics**

# RDEC ORGANIZATION



## ***MISSION FOCUS IS:***

- Advanced Technology Generation and Application
- Information Technology Architecture
- CECOM & Army Systems Engineering
- Technical Support to PMs and PEOs

# TECHNOLOGY GENERATION and LEVERAGING STRATEGIES

- *Internal Tech Base*

- *Alliances for Leverage*

- Enabling Technologies – DARPA
- Demonstration (ATD, ACTD) – Other Services
- Transition and Integration – Industry / Academia

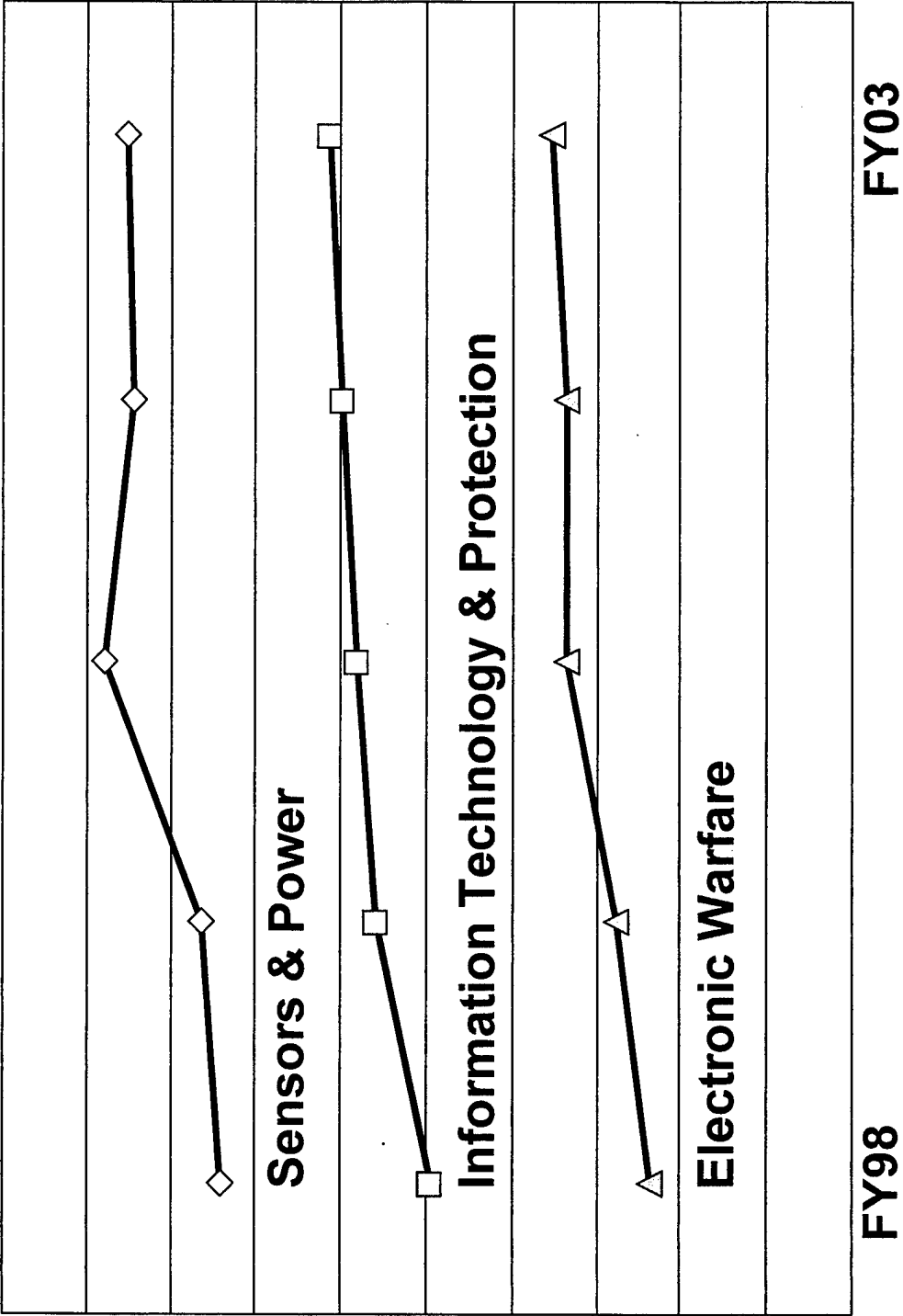
- *Enabling Facilities*

- *Facilitating Programs*

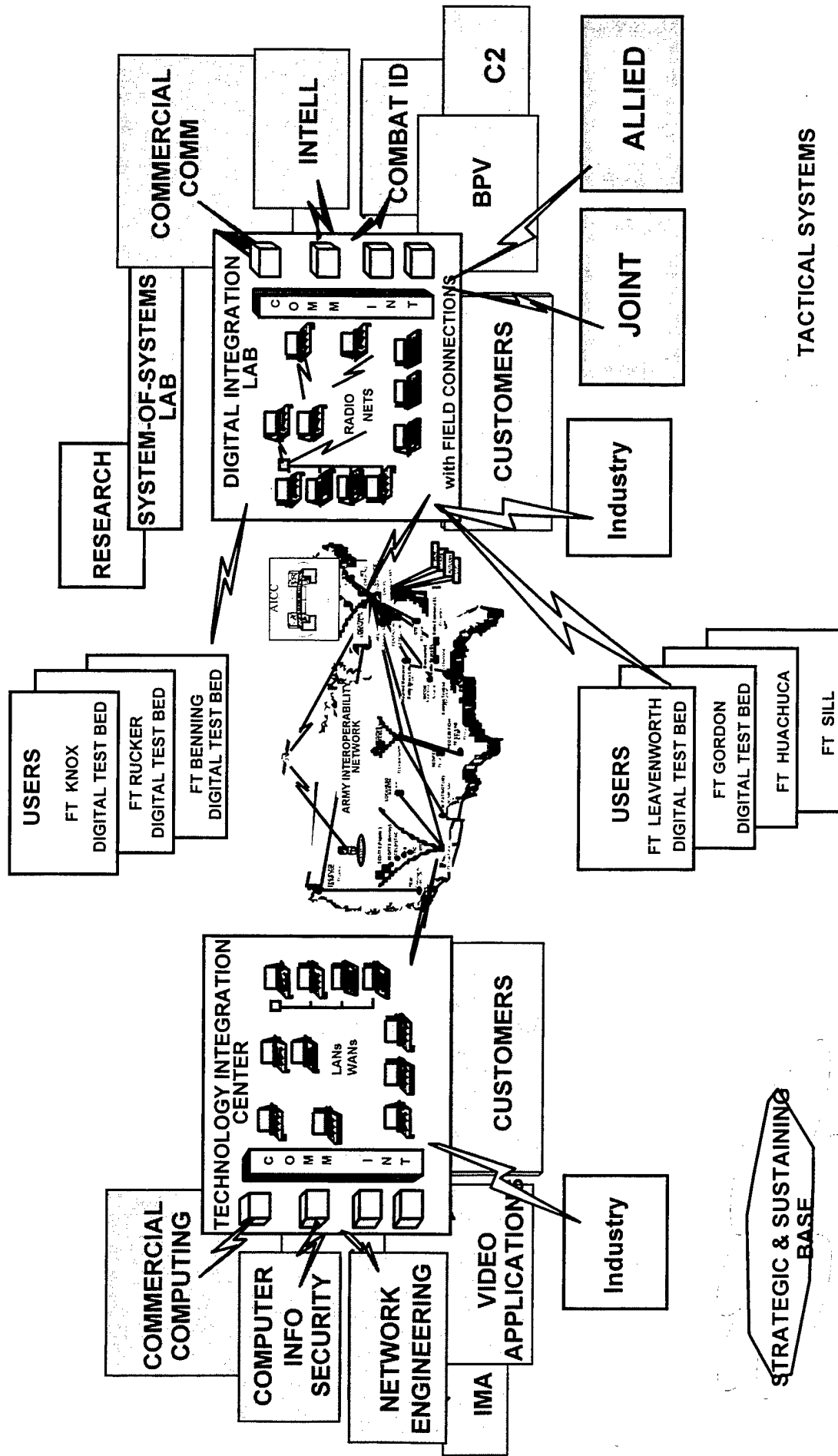
- Digital Integrated Lab – SBIR
- Technology Integration Center – Independent R&D
- Wireless Interworking Testbed – Dual Use Applications
- Information Technology Program  
Innovation Center



# THREE MAJOR AREAS FOR ENABLING TECHNOLOGY (6.2) & DEMONSTRATIONS (6.3)



# Digital Integration Lab (DIL) and Technology Integration Center (TIC)



# WIRELESS INTERWORKING TESTBED (WIT) / INFORMATION TECHNOLOGY INNOVATION CENTER (ITIC)

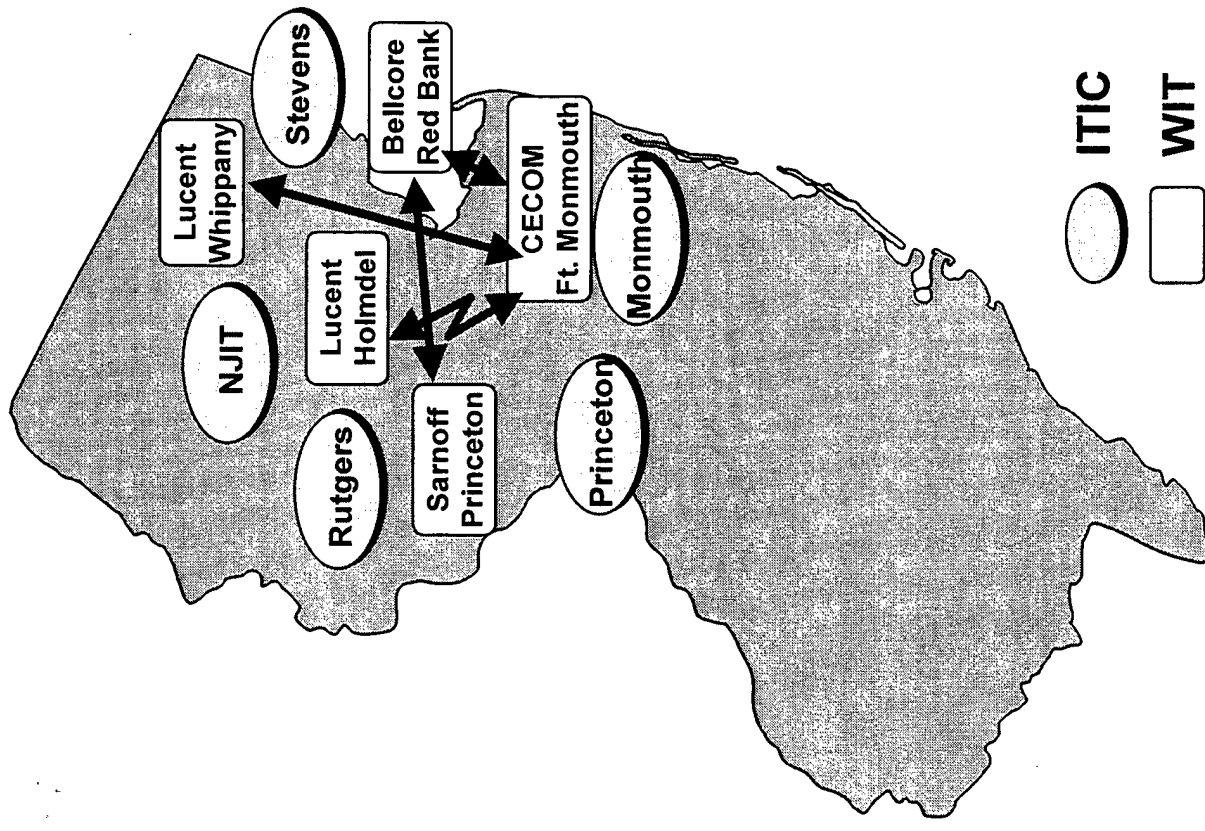
## WIT

Interconnected Military/Commercial  
Laboratories For Dual-Use =

- Interoperability Assessment
- Standards Conformance Testing
- Dual-Market Development
- Collaborative Efforts

## ITIC

Enables partnering for dual-use  
information technology  
ventures; by linking existing  
N.J.-based government, industry,  
and university advanced  
technology centers and small  
business incubators to the WIT.



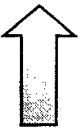


# **TECHNOLOGY OUTREACH CONFERENCE**

- **When - Mid - September 1998**
- **Where - Ft. Monmouth Local Area**
- **Target Audience - Industry & Academia**
- **Briefers - Army & Academia with “One-to-Many” Sessions**
- **Objectives**
  - **Leverage non-army funding**
  - **Focus on likely DARPA enabling technology for efforts of interest to CECOM**
  - **Foster collaboration and partnering with industry and academia**

## **Small Business Innovation Research**

- ***Annual Total Program - approx \$15M***
- ***30 Topics for FY99***
  - 10 Sensors
  - 7 Information Processing
  - 7 High Performance Computing & Simulation
  - 5 Power and Directed Energy
  - 1 Microelectronics & Photonics
- ***Key Dates***
  - May 1 - Solicitation Pre-Release on Internet
  - July 1 - Solicitation Opens
  - Aug 19 - Solicitation Closes
  - Dec 18 - Contract Award

# DUAL USE APPLICATIONS PROGRAM (DUAP) SCIENCE & TECHNOLOGY INITIATIVE

- Overall program objective is to develop dual use technologies with industry as partner
- Integration and prioritization thru service lead, Joint Dual Use Program Office and DDR&E  *Service Lead in FY99*
- *Cost Share: 50% Industry, 25% DUAP Contribution, 25% sponsoring agency*
- *Basis for Award: Quality of Cost Share, Impact on National Defense, Commercial Viability of Technology, Technical and Management approach*
- Leverage Results - *FY97: \$8.0M*  *32.0M*  
*FY98: \$3.2M*  *13.0M*

## DUAP 1999 PROGRAM

- Service Lead with Enabling Technology Program
- Substantial percentage of Enabling Technology (6.2) Program directed to Dual-Use S&T:
  - 5% in 98
  - \$25M in
  - 15% in 01 & thereafter
  - \$76M
- Joint Government/Industry strategy essential to maximize potential of program for mutual benefit
- Feedback needed on what works and what doesn't work
  - Example: No bidders on FY98 topic "Information Operations"
  - Sidebar Session for Industry feedback/suggestions
- CECOM Broad Agency Announcement Projected Release Date: October 1998

# BUSINESS OPPORTUNITIES

- ***Sensors and Power***

(Briefed by Dr. David Heberlein)

- **Advance Radar Deception & Countermeasures**
- **Light Weight, Airborne Minefield Deception**
- **Scatterable Minefield & Munitions Detection**
- **Low Powered Uncooled IR Sensor**
- **Low Power Display Components**

- ***Information Technology & Protection Opportunities***

(Briefed by Mr. Chuck Strimpler)

- **C2 Protect for the Tactical Internet**
- **Communication Systems Technology**





# NOTES



# SENSORS AND POWER OPPORTUNITIES



DR. DAVID HEBERLEIN  
ACTING DIRECTOR

Night Vision and Electronic Sensors  
Directorate

Unclassified

28 Apr 1998

## POINT PAPER

**SUBJECT:** APBI – CECOM RDEC Night Vision Electronic Sensors Technology Initiatives

**OBJECTIVE:** To provide information on CECOM Night Vision Electronic Sensors Directorate's (NVESD's) interest and contract opportunities in the areas of Electro-optics, Countermine, and Protection Suites/Radar.

**FACTS:** NVESD is developing the technologies required for U.S. Forces to see and acquire enemy forces in the most challenging of battlefield conditions and environments; to provide full spectrum situational awareness, protection, targeting and combat ID assist against enemy guided/smart weapon systems; to develop low power high resolution displays; low power uncooled IR technologies; and to develop affordable electro-optical/radar sensors and sensor suites providing improved multi-functional capabilities of existing and new manned/unmanned weapon system platforms for ground, air and individual soldier applications.

Technology efforts included in this briefing are the Advanced Radar and Deception Countermeasures (ARDC), Low Power Display Components, Low Power Uncooled IR Sensors, Lightweight Airborne Minefield Detection (LAMMD), and Stand-off Scatterable Mine and Munitions Detection. These efforts are currently in the Department of the Army approval process. The briefing describes the programs that support several NVESD technology areas and provides general time lines for industry involvement and current funding ranges.

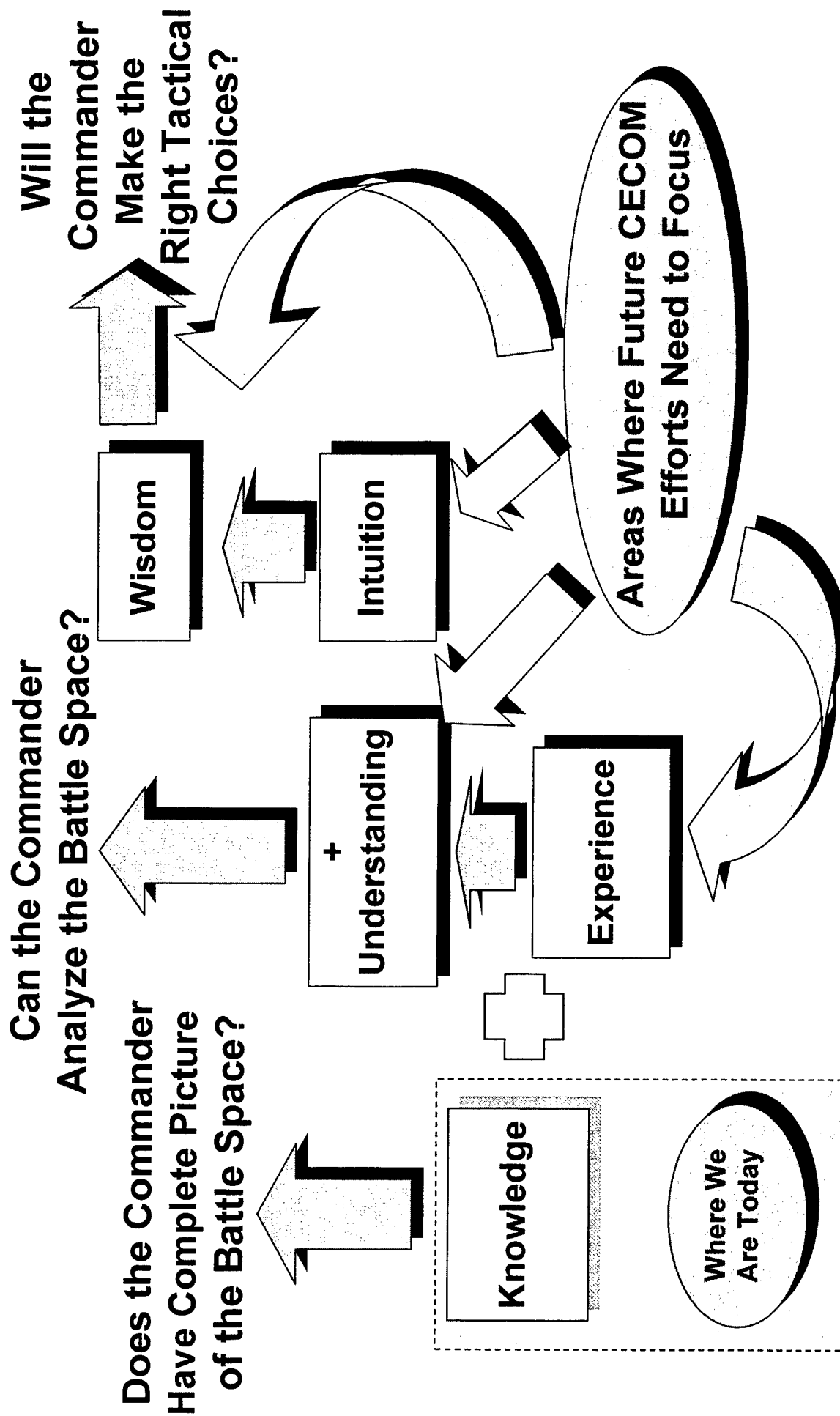
**BRIEFER:** Dr. David C. Heberlein, Acting Director, NVESD, AMSEL-RD-NV-OD, (703) 704-1040, DSN 654-1040.

ACTION OFFICER:  
Keith Dugas  
Technical Planning Branch  
(703) 704-1200  
DSN 654-1200

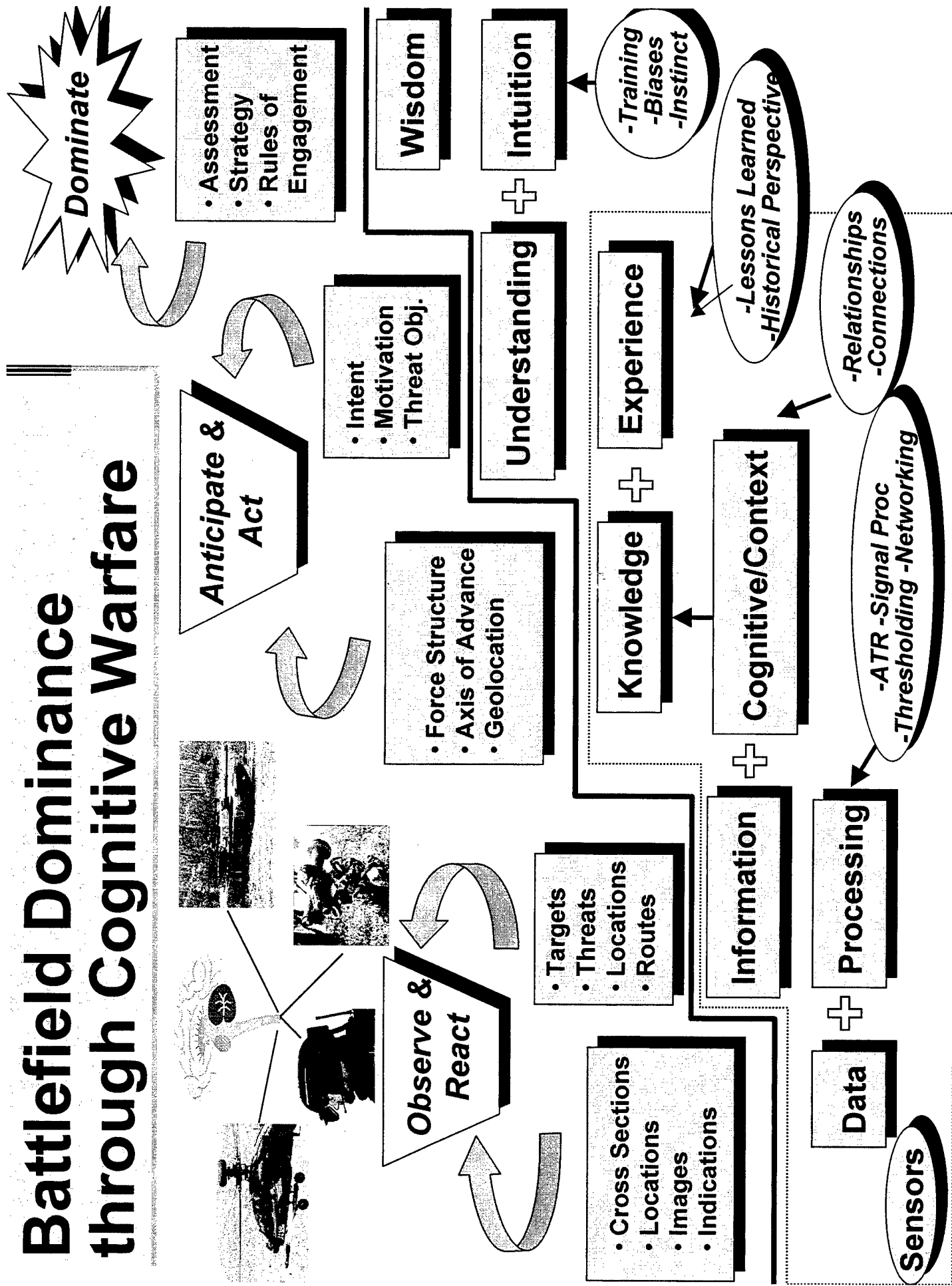




# What's After Knowledge?

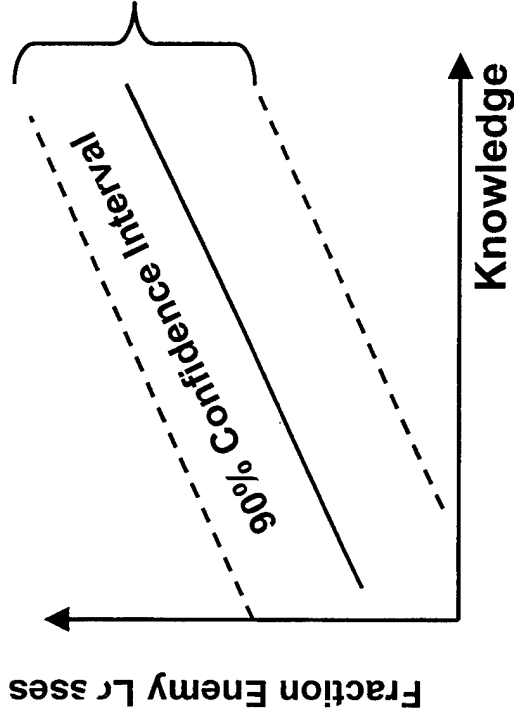
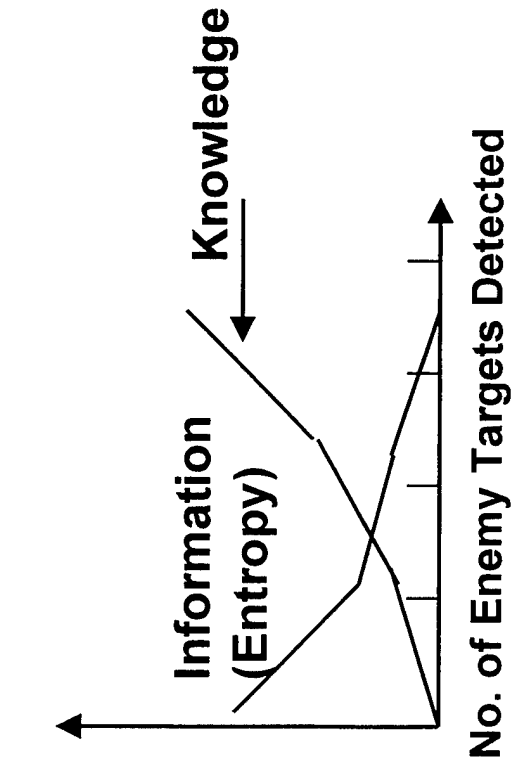


# Battlefield Dominance through Cognitive Warfare





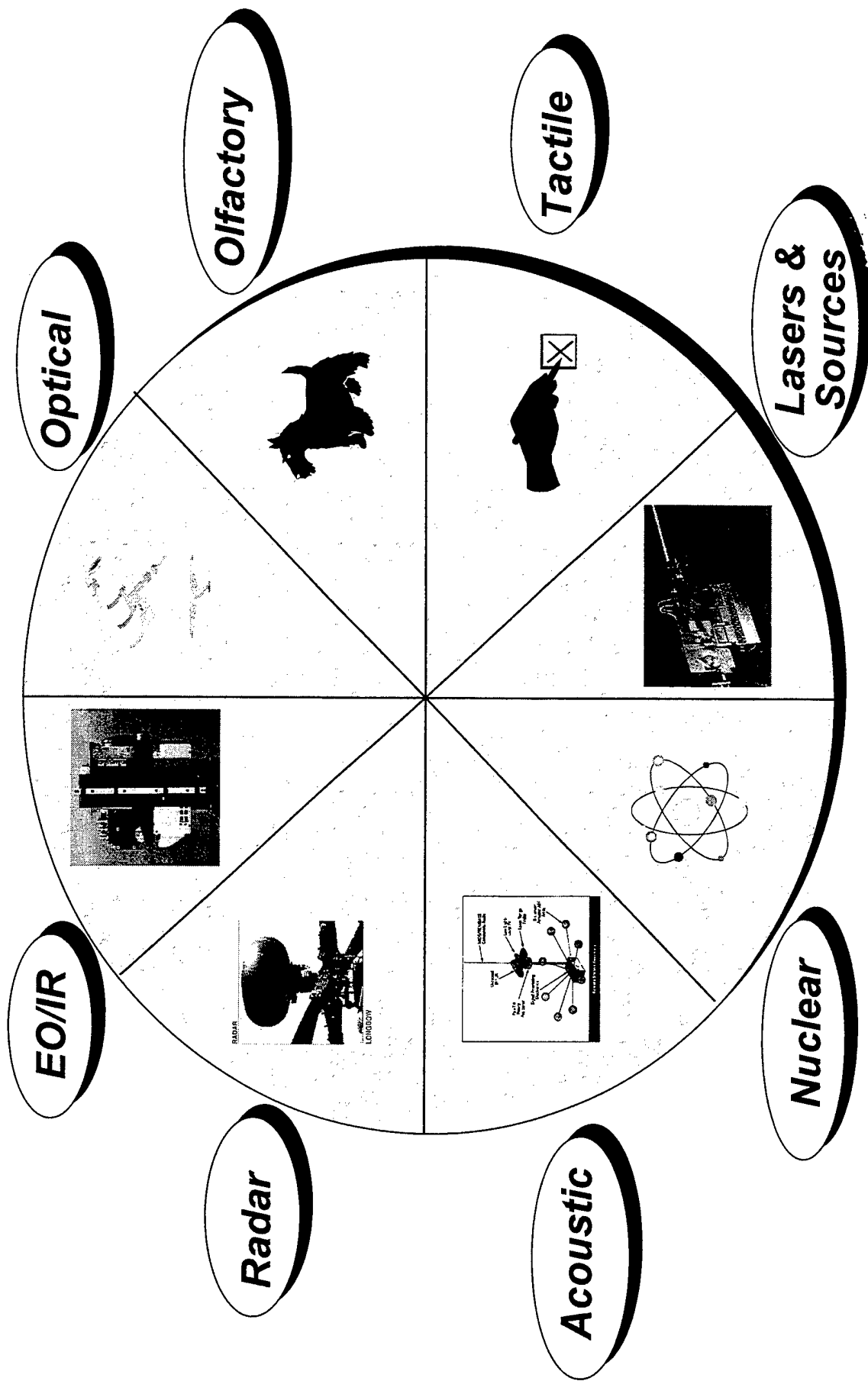
# Knowledge & Combat Effectiveness



**Combat Measures of  
Effectiveness are  
Functions of Knowledge**



# Sensor Modalities



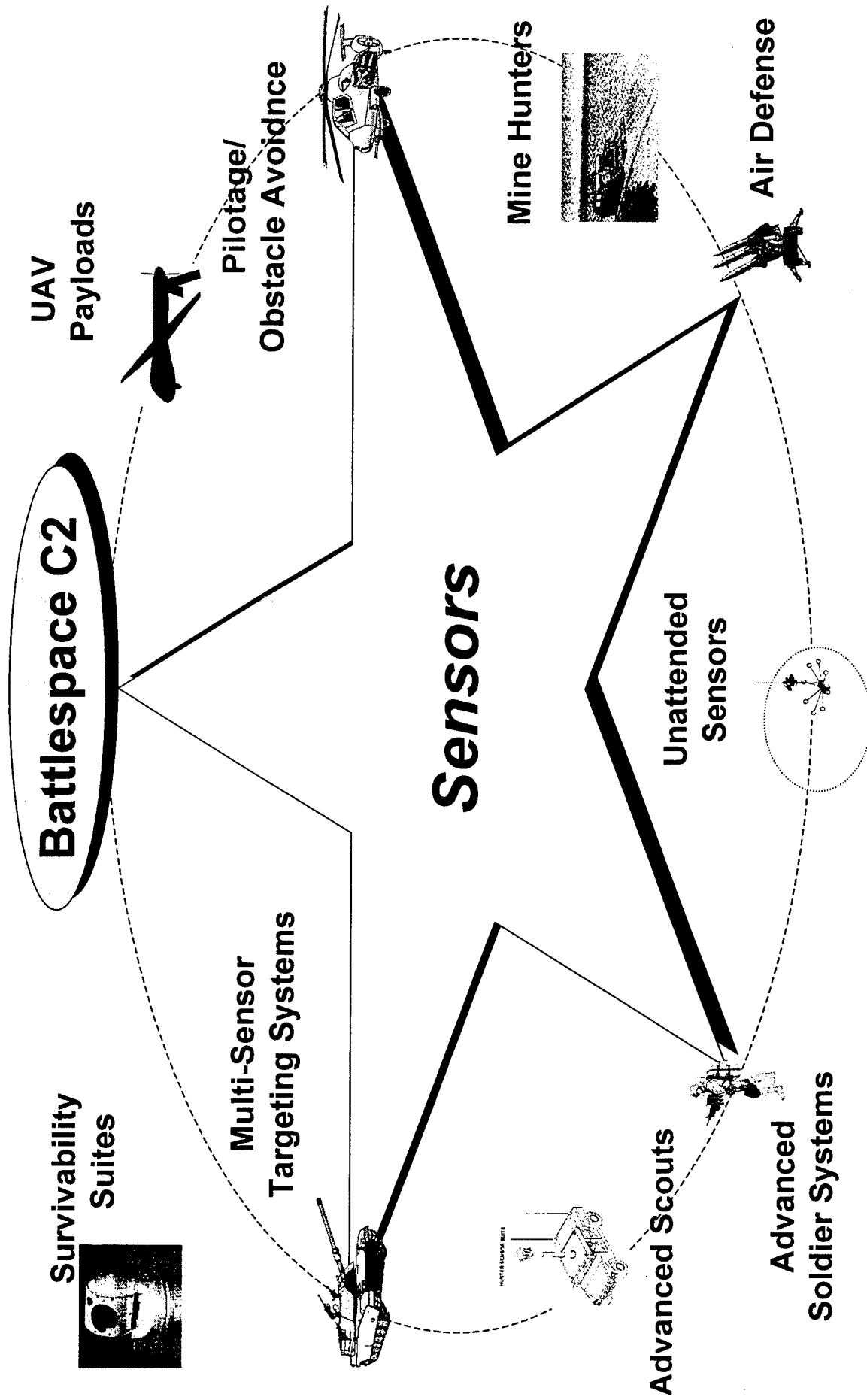




# Sensors for the Digital Battlespace



NAVY AND MARINE CORPS VESSEL TRACKING AND IDENTIFICATION (VETID) SYSTEM. THE VETID SYSTEM IS A JOINT NAVY/MARINE CORPS PROGRAM THAT PROVIDES A COMMON OPERATIONAL PICTURE OF ALL VESSELS IN THE BATTLESPACE. THE VETID SYSTEM IS A JOINT NAVY/MARINE CORPS PROGRAM THAT PROVIDES A COMMON OPERATIONAL PICTURE OF ALL VESSELS IN THE BATTLESPACE.



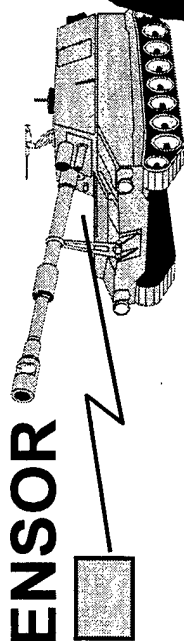


# Sensor Utilization

Approved for Release by NSA on 09-08-2013 pursuant to E.O. 13526

Fire Support

SENSOR



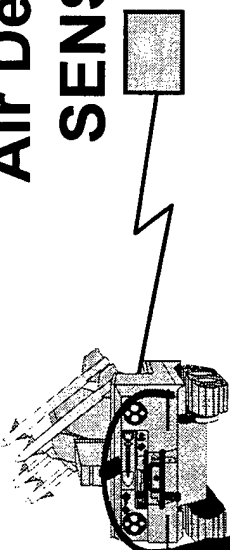
Maneuver

SENSOR



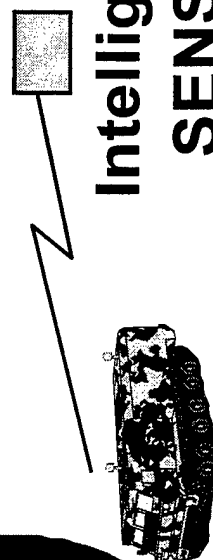
Air Defense

SENSOR



Intelligence

SENSOR

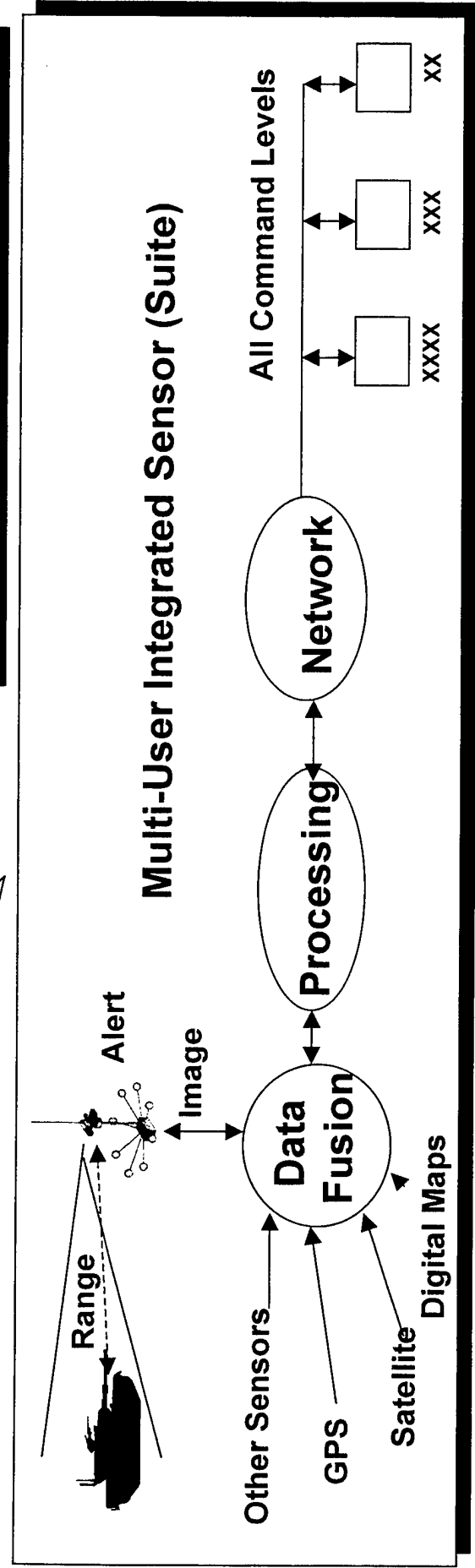
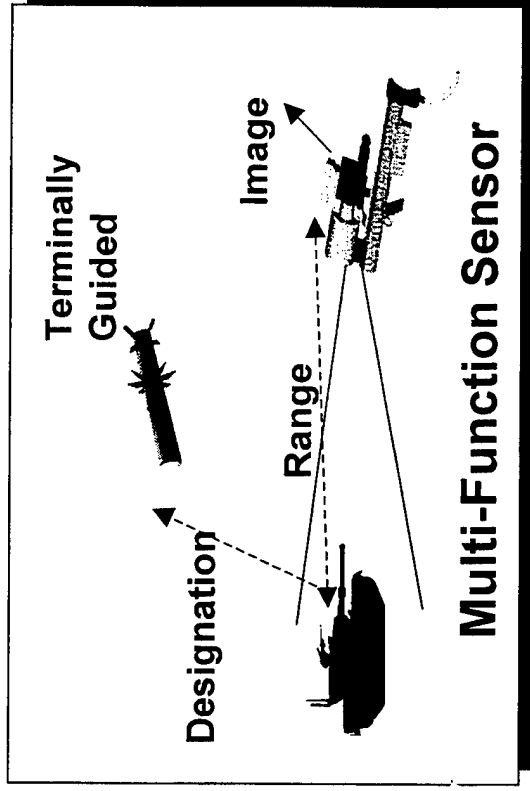
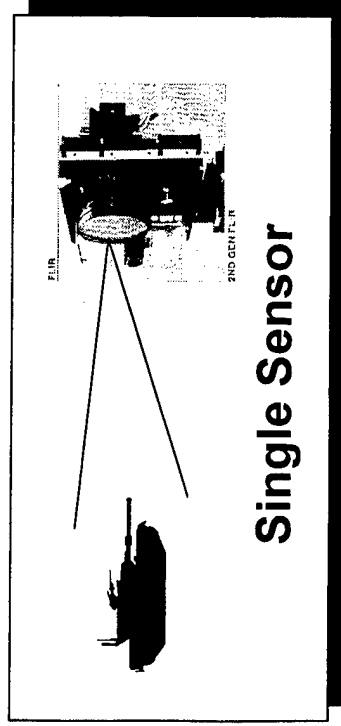


Sensor  
w/Multiple  
Function

- Targeting
- Intelligence
- Friendly Situation
- Enemy Situation
- Logistics



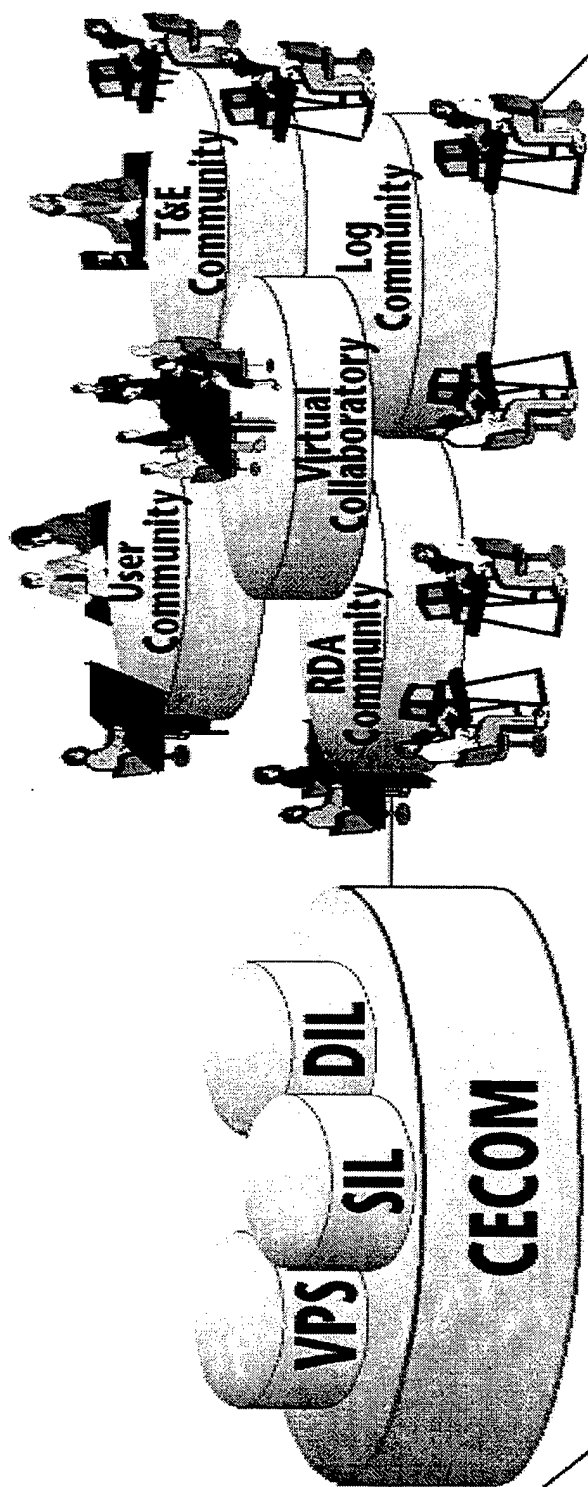
# Evolution of Sensor Concepts





# System of Systems Vision

*M&S and Collaborative Virtual Prototyping and Project Management Environment*



## Systems of Systems C4I 2WS Integration

*Integrates Core Competencies*

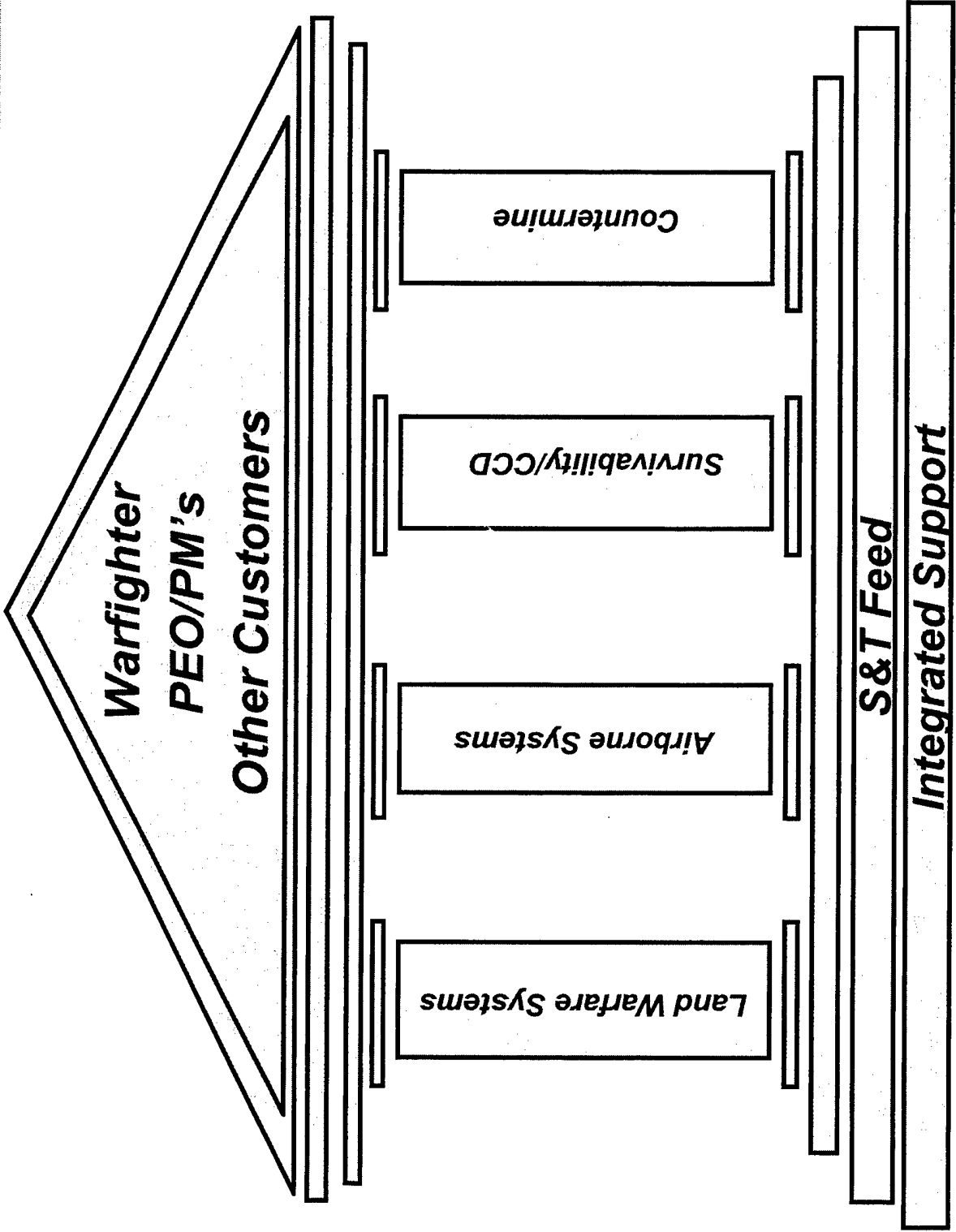
Technology Generation & Application

Logistics, Power Projection

Acquisition Excellence



# Organization





# OVERVIEW



- ADVANCE RADAR DECEPTION & COUNTERMEASURES
- LIGHTWEIGHT, AIRBORNE MINEFIELD DECEPTION
- SCATTERABLE MINEFIELD AND MUNITIONS DETECTION
- LOW POWERED UNCOOLED IR SENSOR
- LOW POWER DISPLAY COMPONENTS



# SENSORS AND POWER OPPORTUNITIES



## Advanced Radar Deception & Countermeasures



# Program Definition

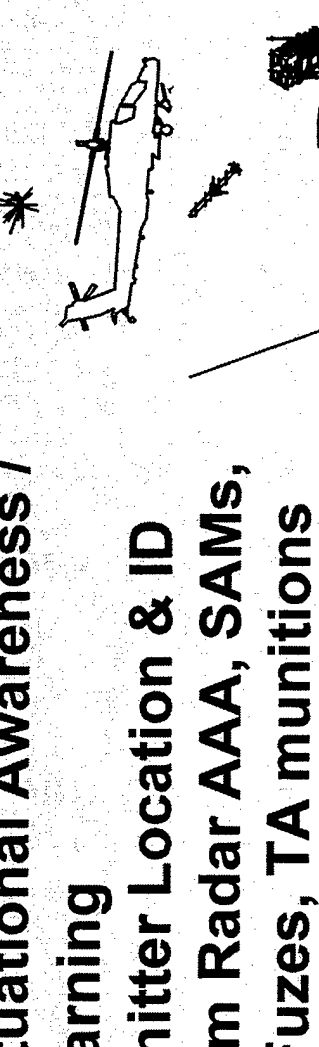


- Use Horizontal Technology Integration (HTI) principles to develop a new generation of common deception and countermeasures modules
- Develop common modules that will provide radar deception and countermeasures to protect rotary wing aircraft, ground vehicles and small units from air defense radar systems, imaging radars and smart munitions
- Provide technologies to include deception of imaging radars & integrated air defense systems that will degrade & delay enemy's ability to locate & destroy early entry forces
- Primary products will be a multi-functional wide band modulator, associated software algorithms, antennas and transmitter modules that can provide both deception and countermeasures waveforms, plus weight/life cycle cost/prime power/maintenance reductions.





1. *Journal of the American Statistical Association*, 1999, 94(447), 1086-1092.

- Situational Awareness / Warning
  - Emitter Location & ID
  - Jam Radar AAA, SAMs, Fuzes, TA munitions
  - Targeting Assist
  - Combat ID Assist
- 

- 184



# Program Requirements



## Technology goals:

- Deceive search, acquisition & imaging radars
- Reduce probability of acquisition by monopulse and phased array air defense radars by 50%
- Prefunction 75% of MMW top attack munitions at two times the lethal radius
- Prefunction 90% of AAA proximity fuzes at two times the lethal radius
- 200% increase in prefunction range versus Category 2 and 3 artillery fuzes



# Contract Opportunities



- **Title:** Advanced Radar Deception & Countermeasures
- **Objective:** Provide common module capability for radar deception and countermeasures to protect air and ground vehicles from advanced threats
- **Proposed Contract Type:** TBD
- **Key Milestones:** 4QFY00 - Transition DARPA digital modules  
4QFY02 - Integration of modified modules  
4QFY04 - Field testing/write final report
- **Estimated Value:** 2-3 Contracts/\$1-2 Million each
- **Technical POC:** Ray Irwin, NVESD, 732-427-4589
- **Acquisition POC:** Debbie Gilligan, 732-532-5454



# SENSORS AND POWER OPPORTUNITIES



## Lightweight, Airborne Minefield Detection



# Program Definition



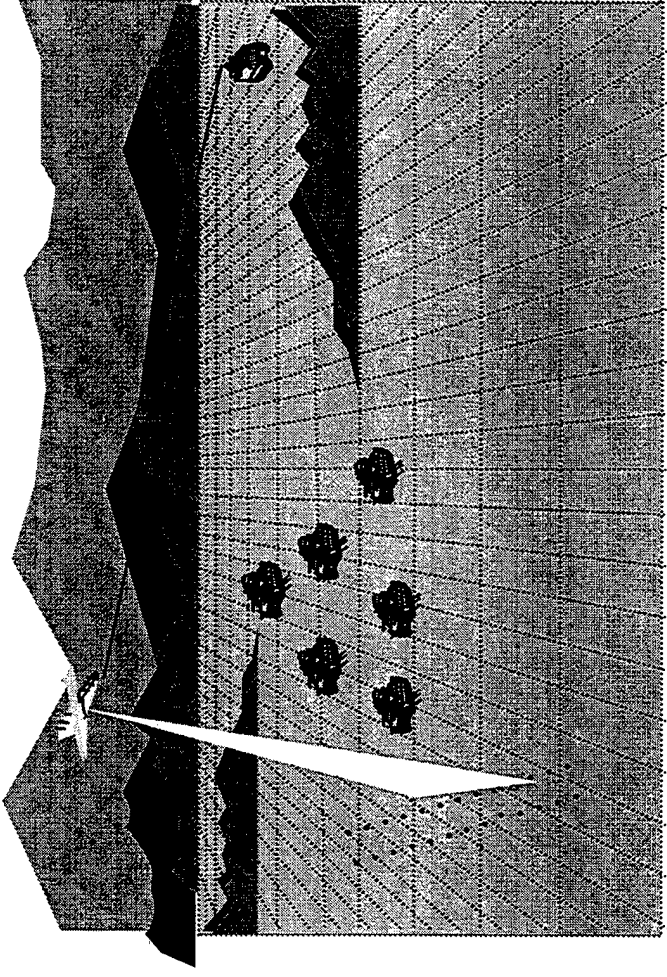
- Explore innovative concepts and technology to support a lightweight, airborne stand-off mine and minefield detection capability
- Investigate a variety of new component and focal plane array technologies such as 3-5um staring FPA's, multi/hyperspectral, passive polarization, passive millimeter wave, foliage penetration radar, synthetic aperture radar, active laser sources, sensor fusion and electronic stabilization to support a lightweight capability for future tactical or short range UAV's



# Program Status



Approved for Release by NSA on 09-08-2013 pursuant to E.O. 13526



- **Acquiring mine signature data**
- **Baselining algorithm performance**
- **Initiating phenomenology investigations**



# Program Requirements



## Technology goals:

- 60% probability of detection versus buried nuisance mines on unpaved roads
- 80% probability of detection versus surface patterned minefields
- 65% probability of detection versus buried patterned minefields
- 70% probability of detection versus surface scattered mines
- False alarm rates (false alarms / square kilometer of area covered) of less than 0.5
- Sensor weight of less than 65 pounds



# Contract Opportunities



- **Title:** Lightweight, Airborne Minefield Detection
- **Objective:** Explore innovative concepts & technologies to support lightweight airborne minefield & nuisance mine detection capability
- **Proposed Contract Type:** TBD
- **Key Milestones:** 4QFY99 - Complete study efforts  
4QFY01 - Complete sensor build & integrate  
4QFY03 - Conduct system demonstration
- **Estimated Value:** Algorithm Development:  
2-3 Contracts/\$4-6 Million each  
Sensor Development:  
1-2 Contracts/\$8-11 Million each
- **Technical POC:** Ron Rupp, NVESD, 703-704-2442
- **Acquisition POC:** Anna Kimberly, 703-325-5800





# SENSORS AND POWER OPPORTUNITIES



## Scatterable Minefield & Munitions Detection



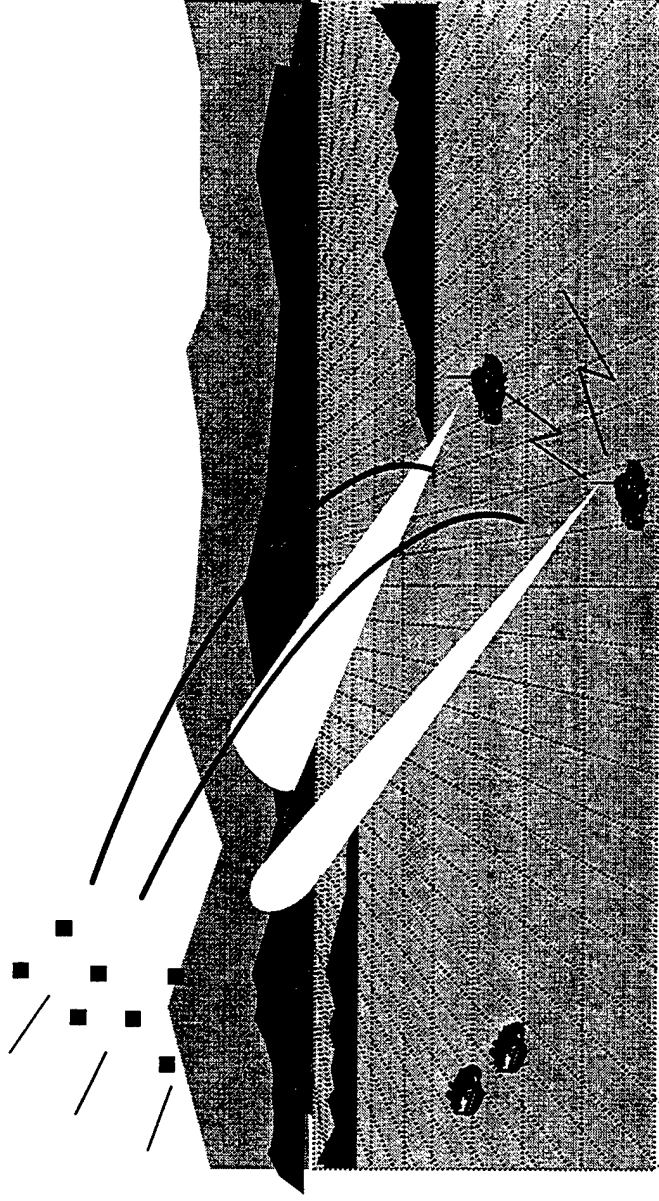
## Program Definition



- This technology will provide BDE and below maneuver units an indigenous, rapidly transportable, sensor suite to provide real-time detection and impact location of scatterable munitions and mines.
- This research will explore the capability of the Multifunction Staring Sensor Suite (MFS3) and/or the millimeter wave ground radar (MGR) to scan the horizon continuously to acquire projectile tracks from volley fire events. Following initial detection, the sensor suite will track projectiles, determine range, trajectory and predict impact location and/or firing battery location.
- The system will be capable of response to other sensor cues and provide handoff of hostile weapons location data for counter battery missions



# Program Status



- Currently under evaluation by the Department of the Army



# Program Requirements



<u>Category</u>	<u>Baseline</u>	<u>STO Goal</u>
Probability of Detection	None	0.90
Detection Range	None	5KM
Impact Location Radius	None	200M
Max False Alarm Rate	None	0.10
Operating Environment	None	Identified Munition 24 Hour Operation Limited by Terrain



# Contract Opportunities



- **Title:** Scatterable Minefield & Munitions Detection
- **Objective:** This technology will provide BDE and below maneuver units an indigenous, rapidly transportable, sensor suite to provide real-time detection and impact location of scatterable munitions and mines
- **Proposed Contract Type:** BAA
- **Key Milestones:** Contract Award - FY00
- **Estimated Value:** 1-2 Contracts/\$1.5-2.5 Million each
- **Technical POC:** George Maksymenko, NVESD, 703-704-2420
- **Acquisition POC:** Anna Kimberly, 703-325-5800



# SENSORS AND POWER OPPORTUNITIES



## Low Power Uncooled IR Sensor



# Program Definition



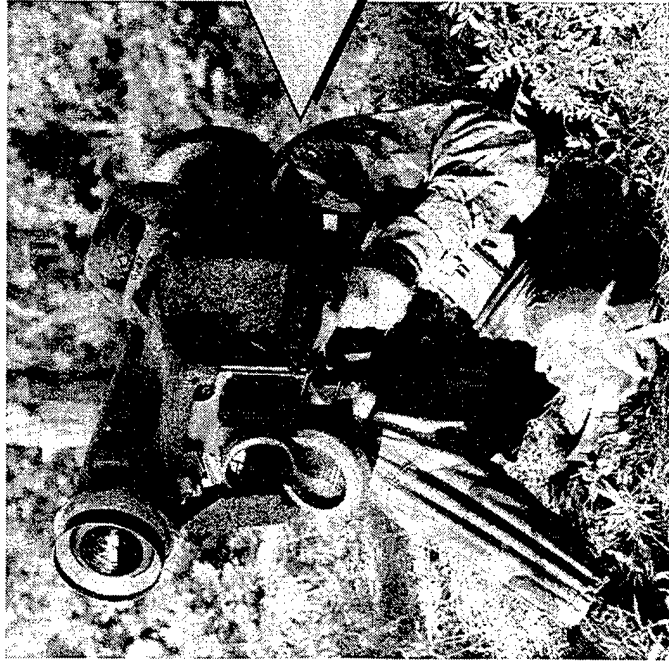
- **Demonstrate low power sensor technology for upgrades to Land Warrior Thermal Weapons Sights (TWS) and to support a “Land Warrior-Javelin” integration**
- **Produce a compact Weapons Sight that incorporates an improved generation of uncooled infrared technology**
- **Comparable performance to current Javelin CLU with significant size/weight/cost savings**
- **Pilot demonstration of integrated power management and low power electronics architecture**
- **Goal of 36 hours of operations on BA-5847 C/U battery**
- **Enable Land Warrior to fire Javelin missiles without use of the command launch unit (CLU).**
- **Horizontal Technology Integration (HTI) opportunities for Objective Individual Combat Weapon (OICW) and Objective Crew Served Weapon (OCSW)**



# Program Status

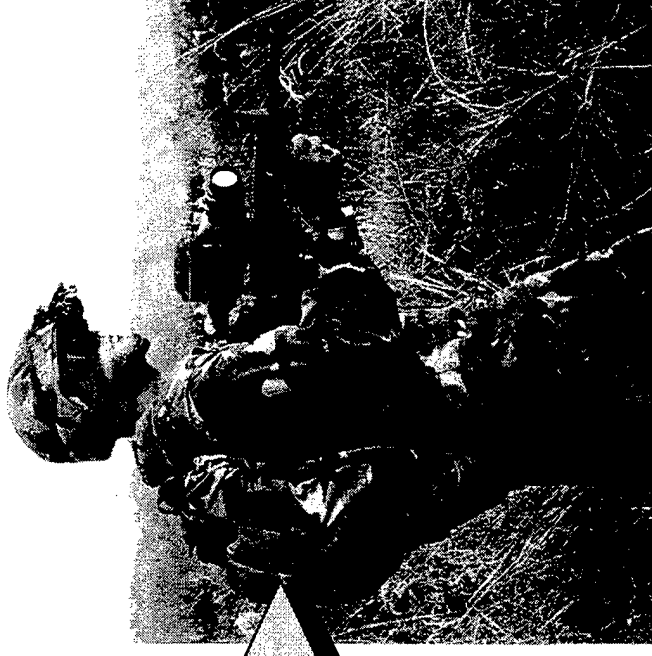


## JAVELIN



**Current device is cooled and heavy**

## LAND WARRIOR



**Uncooled yet met major requirement through soldier computer**

- **Currently under evaluation by the Department of the Army**





# Program Requirements



Capability	Present CLU/TWS	Minimum (Uncooled)	Goal (Uncooled)
Recognition of Tank Target	Range (CLU) (Classified)	Present CLU Range	1.2 x Present
Power	8 Watts (TWS)	4 Watts	2 Watts
Batteries/72 hr Mission	9 (TWS) 5.4 lbs	4 2.4 lbs	2 1.2 lbs
Weight	5.4 lbs (TWS)	4 lbs	3.5 lbs



# Contract Opportunities



- **Title:** Low Power Uncooled IR Sensors
- **Objective:** Demonstrate low power advanced sensor technology and produce a compact Weapons Sight that incorporates an improved generation of uncooled infrared technology
- **Proposed Contract Type:** TBD
- **Key Milestones:** 4QFY00 - Complete requirements studies  
4QFY01 - Complete design of low power electronics/power management  
4QFY03 - Complete fabrication for delivery to existing systems
- **Estimated Value:** 1 Contract/\$9-11 Million
- **Technical POC:** Neil Supola, NVESD, 703-704-3181
- **Acquisition POC:** Debbie Gilligan, 732-532-5454



# SENSORS AND POWER OPPORTUNITIES



## Low Power Display Components



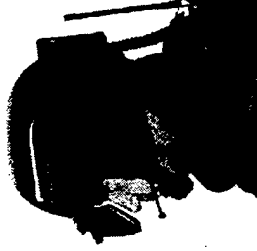
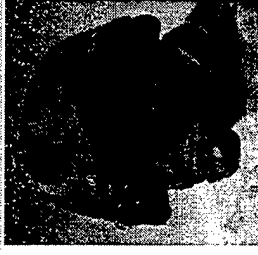
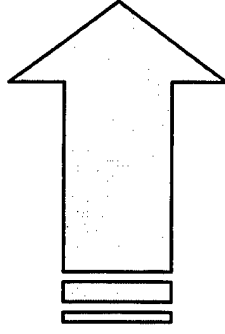
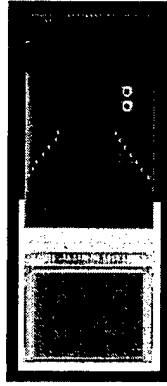
# Program Definition



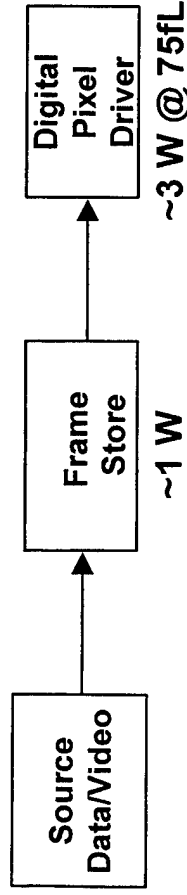
- This effort will reduce power consumption by >50% over existing helmet mounted displays, enabling the warfighter to execute longer missions with less head borne weight and logistics burden.
- The technology products will be miniature flat panel displays that consume low power, save weight and space, support both monochrome and full color applications, have high image fidelity, and integrate easily with current and next generation sensors.
- Technology to support Army After Next capabilities includes enhanced color display for the future soldier system, low power 1920 X 1080 for the Mounted Warrior application, companion optical components to enhance display properties, and demonstration of compatibility with the HTI 2nd Gen FLIR



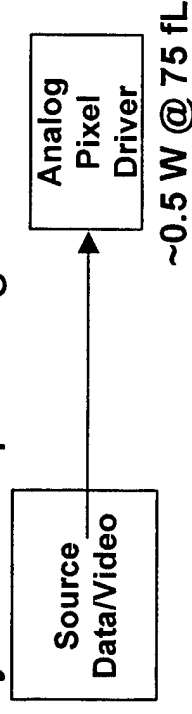
# Program Status



- Flat Panels for Head Mounted Displays & Weapon Sights



- Existing Flat Panel Display Architecture for Dismounted Applications  
Current



- Low Power Flat Panel Display Architecture for Dismounted Applications  
Proposed

- Currently under evaluation by the Department of the Army



# Program Requirements



## Occluded Design Applications (Dismounted / Mounted Warrior)

- Monochrome low power 640 x 512: 8bit, < 0.5W, 75fL
- Monochrome low power 1280 x 1024: 8bit, < 0.8W, 75fL
- Monochrome low power 1920 x 1080: 8bit, < 1.0W, 75fL
- Color low power 640 x 512: 24bit, < 1.0W, 25fL

## See-through Design Applications (Aviation / Air Warrior)

- Monochrome high brightness 1280 x 1024: 8bit, 1500fL
- Monochrome high brightness 1920 x 1080: 8bit, 1500fL



# Contract Opportunities



- **Title:** Low Power Display Components
- **Objective:** Reduce power consumption by >50% over existing helmet mounted displays, support both monochrome and full color applications, have high image fidelity, and integrate easily with current and next generation sensors.
- **Proposed Contract Type:** TBD
- **Key Milestones:**
  - 4QFY00 - Demo monochrome 1280x102
  - 4QFY02 - Continue 1280x1024 & 1920x108
  - 4QFY03 - Complete manufacturing base efforts and demo improved displays
- **Estimated Value:** 1-2 Contracts/\$2-3 Million each
- **Technical POC:** Charles Bradford, NVESD, 703-704-1317
- **Acquisition POC:** Debbie Gilligan, 732-532-5454



# NOTES



# Information Systems Technology



**CHUCK STRIMPLER**

**ASSOCIATE DIRECTOR FOR TECHNOLOGY PLANNING  
SPACE & TERRESTRIAL COMMUNICATIONS  
DIRECTORATE**

**UNCLASSIFIED**

13 MAY 98

Point Paper

SUBJECT: Space & Terrestrial Communications Directorate APBI Contract Opportunities

PURPOSE: To inform the APBI audience of contractual opportunities within S&TCD.

FACTS:

- S&TCD's R&D program is comprised of Advanced Technology Demonstrations (ATDs) and Science and Technology Objectives (STOs).
- Five contractual opportunities exist through S&TCD's STO's and ATD's and one from I2WD:

The first opportunity, CICM UHF Cosite Mitigation for Brigade Light Digital TOC, is a procurement through a Broad Agency Announcement (BAA), June FY98. Expected award is 1Q FY99.

The second and third opportunities, JTR Antenna and Soldier Radio Advanced Technology, are procurements through a BAA, Oct FY97. Expected award is 2Q FY99.

The fourth opportunity, Network Management, is a procurement through a BAA, May FY00. Expected award is 1Q FY01.

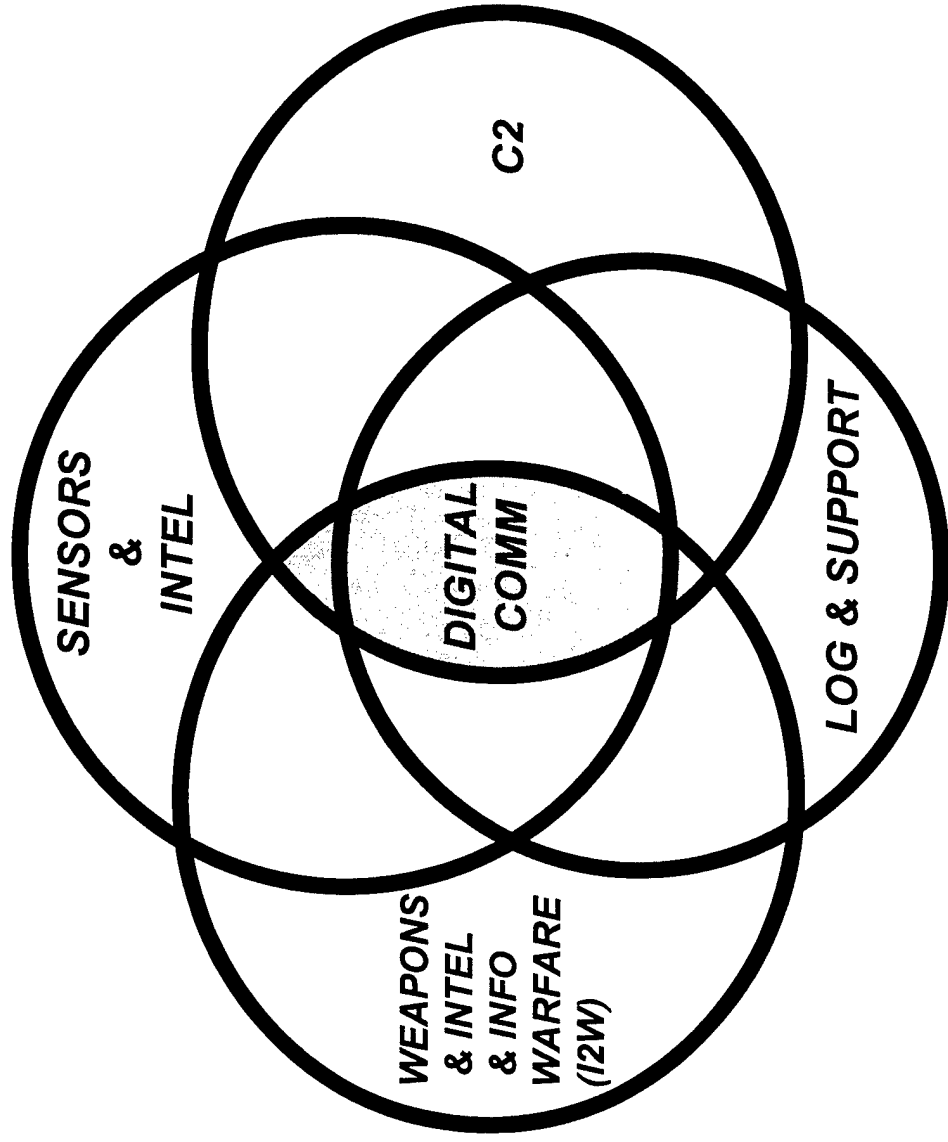
The fifth and sixth opportunities are part of the Tactical C2 Protect ATD, with one opportunity each from S&TCD and I2WD. The S&TCD opportunity, Tactical C2 Protect, is a procurement through a BAA, Oct FY97. Expected award is 1Q FY99. The I2WD opportunity, Communication Exploitation Tools, is a procurement through a BAA, Aug FY99. Expected award is 2Q FY00/1Q FY01.

BRIEFER: Mr. Chuck Strimpler, AMSEL-RD-ST-DD, (732) 427-3451.



# **Communication Systems Technology**

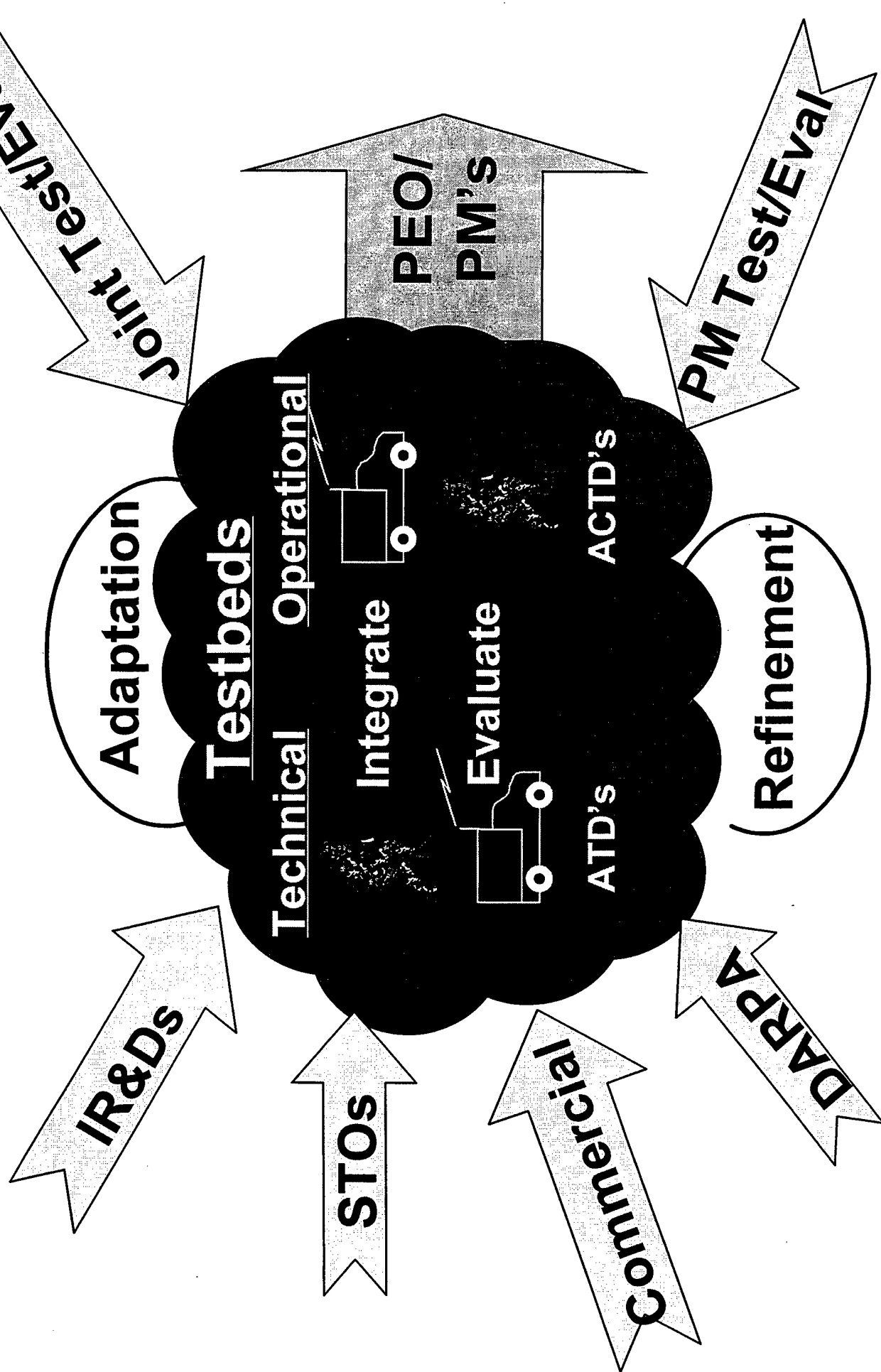
# DOMINANCE IN THE INFORMATION AGE



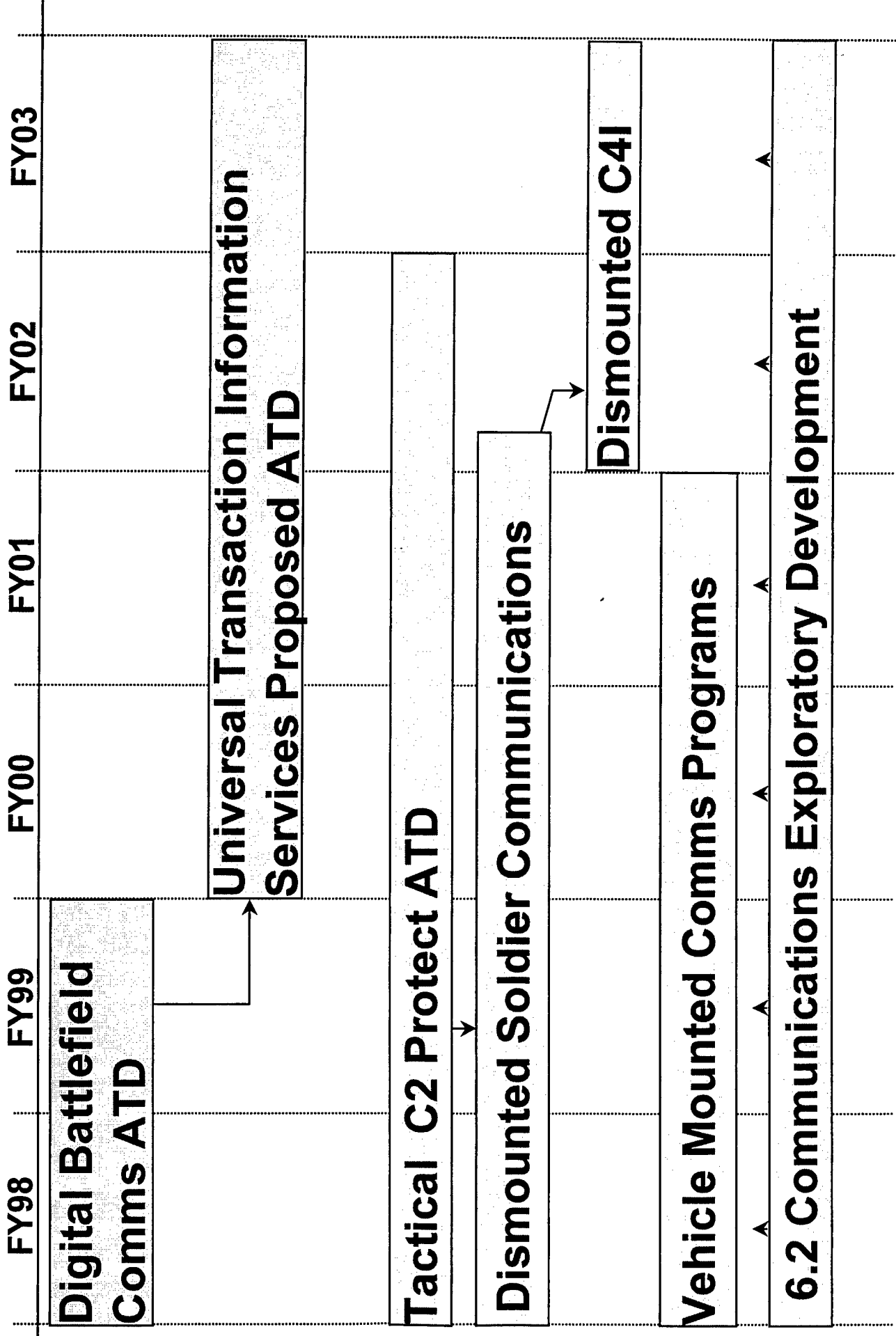
Space & Terrestrial Communications Directorate



# CONTINUOUS EVOLUTIONARY DEVELOPMENT

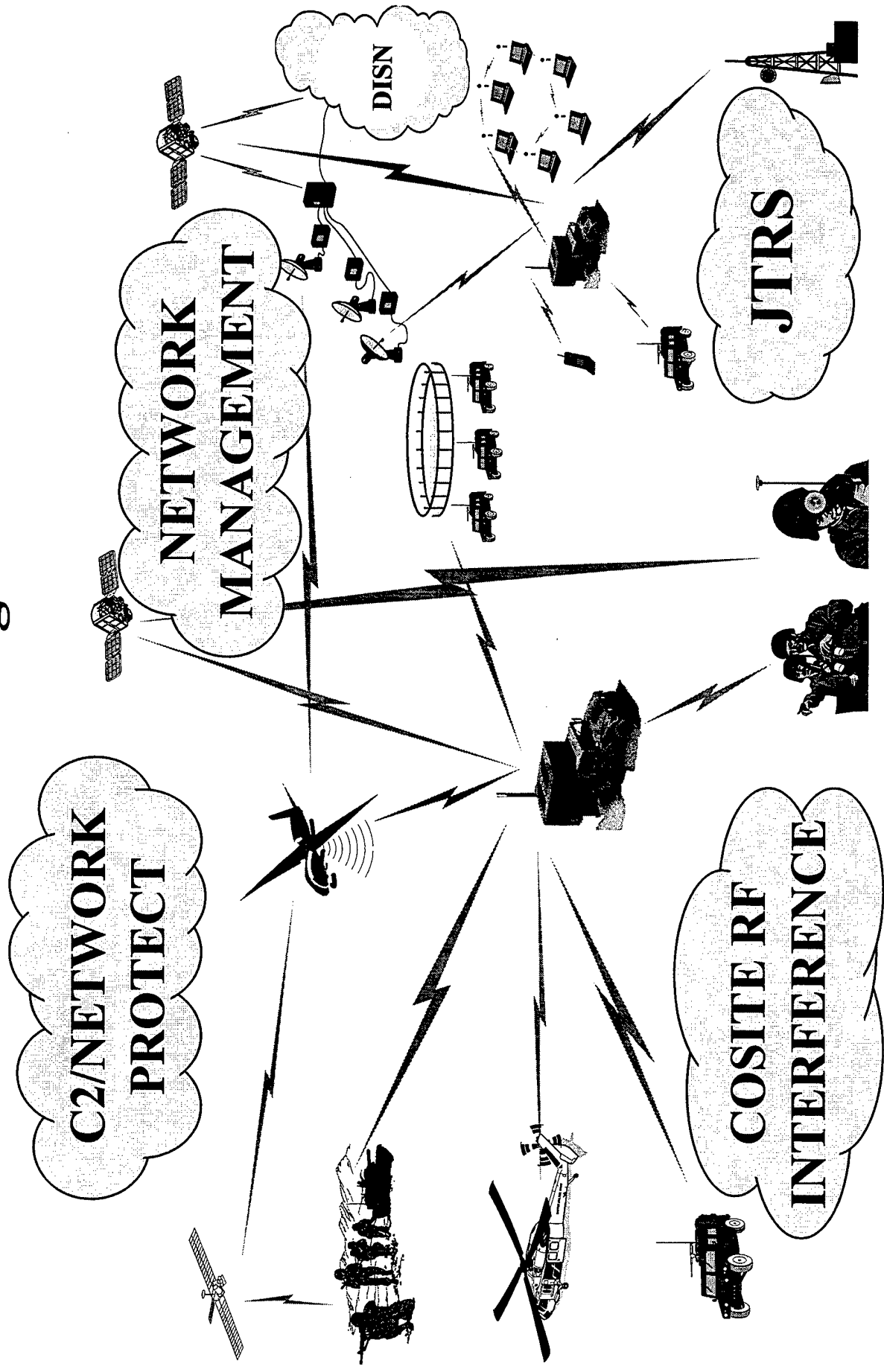


SIMPLIFIED COMMUNICATIONS S&T ROADMAP



# Challenges

# Challenges



# CONTRACTUAL OPPORTUNITIES

**TITLE:** CICM UHF Cosite Mitigation for Brigade Light Digital TOC (LDTOC)

**OBJECTIVE:** Develop WideBand power amplifiers for use with Multiband Multimode Joint Tactical Radio (JTR)  
Develop UHF Multiplexer to couple multiple UHF transceivers to a single broadband antenna

**CONTRACT TYPE:** FFP Contract Wide Band Amplifier (BAA 6/98)  
FFP Contract UHF Multiplexer/Interference Canceller

**ESTIMATED VALUE:** \$1 - \$1.3M , 1 Year Effort, each task

<b><u>KEY MILESTONES:</u></b>	Wide Band PA award	1 Qtr FY99
	UHF Multiplexer/Canceller award	1 Qtr FY99

**POC:** Yoram Levy, Steve Goodall (972)4274664, (972)5320445

**ACQUISITION POC:** Stephanie Scandiffio, (732) 532-4386



# CONTRACTUAL OPPORTUNITIES

**TITLE:** JTR Antenna

**OBJECTIVE:** Develop broadband 30Mhz to 450 Mhz antenna.

Gain profile: -5, 0, +1 dBi @ 30, 50, 88 MHz and  
+2, +4 dBi @ 225, 450 Mhz

**CONTRACT TYPE:** CPEFF (BAA Oct 97)

**ESTIMATED VALUE:** \$250 - \$300K, 2 Year Effort

<b><u>KEY MILESTONES:</u></b>	Award	2 Qtr FY99
	Prototype delivery	4 Qtr FY-01

**POC:** Dr. Peter Cunningham (732)427-4189

**ACQUISITION POC:** Frank Caltabilota (732) 532-3832

# CONTRACTUAL OPPORTUNITIES

**TITLE:** Soldier Radio Advanced Technology

**OBJECTIVE:** Develop a system engineering and rapid prototyping environment to support the design, development, test and evaluation of software programmable radio designs, modular architectures, and flexible mobile networking technologies

JTR and FORCE XXI Land Warrior S&T Program transition strategies

**CONTRACT TYPE:** CPFF (BAA, Oct 97)

**ESTIMATED VALUE:** \$2.0 - \$2.4M, 3 Year Effort

**KEY MILESTONES:**

- ◆ Contract award(s) - 2Q FY99
- ◆ Design recommendations and transition strategies - 4Q FY01

**POC:** Perry Hugo (732) 427-2295

**ACQUISITION POC:** Frank Caltabillota (732) 532-3832

# CONTRACTUAL OPPORTUNITIES

TITLE: Network Management

OBJECTIVE: Modify Network Management tools to demonstrate efficient use in low bandwidth mobile tactical environments. Demonstrate efficient use of centralized and decentralized management techniques.

CONTRACT TYPE: FFP, (BAA May FY00) for exploring next generation Network Management techniques as applied to low bandwidth mobile tactical environments.

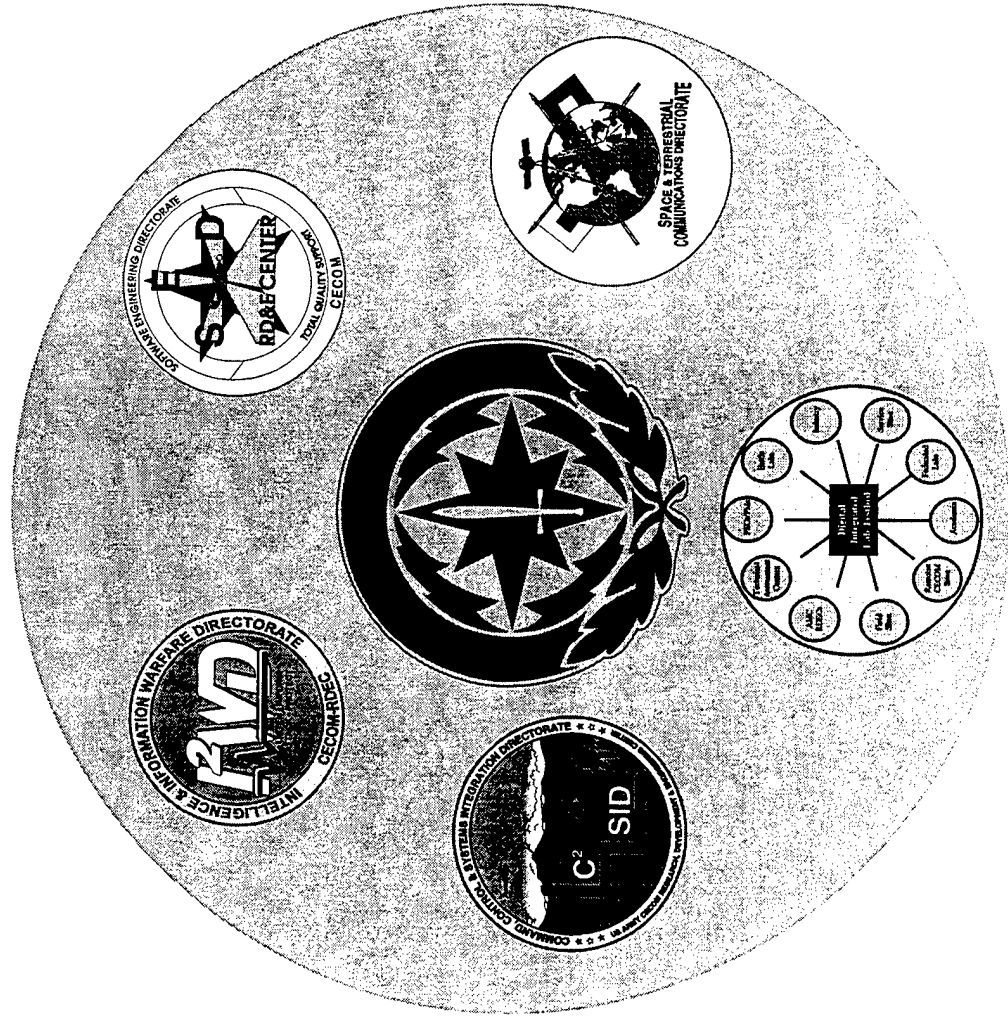
ESTIMATED VALUE: \$450 - \$500K , 3 Year Effort

KEY MILESTONES: Network Mgmt award 1 Qtr FY01  
Feasibility Demo 3 Qtr FY03

POC: Bill Sverapa (732)427-2118

ACQUISITION POC: Frank Caltabilota (732) 532-3832

# TACTICAL C2 PROTECT ATD

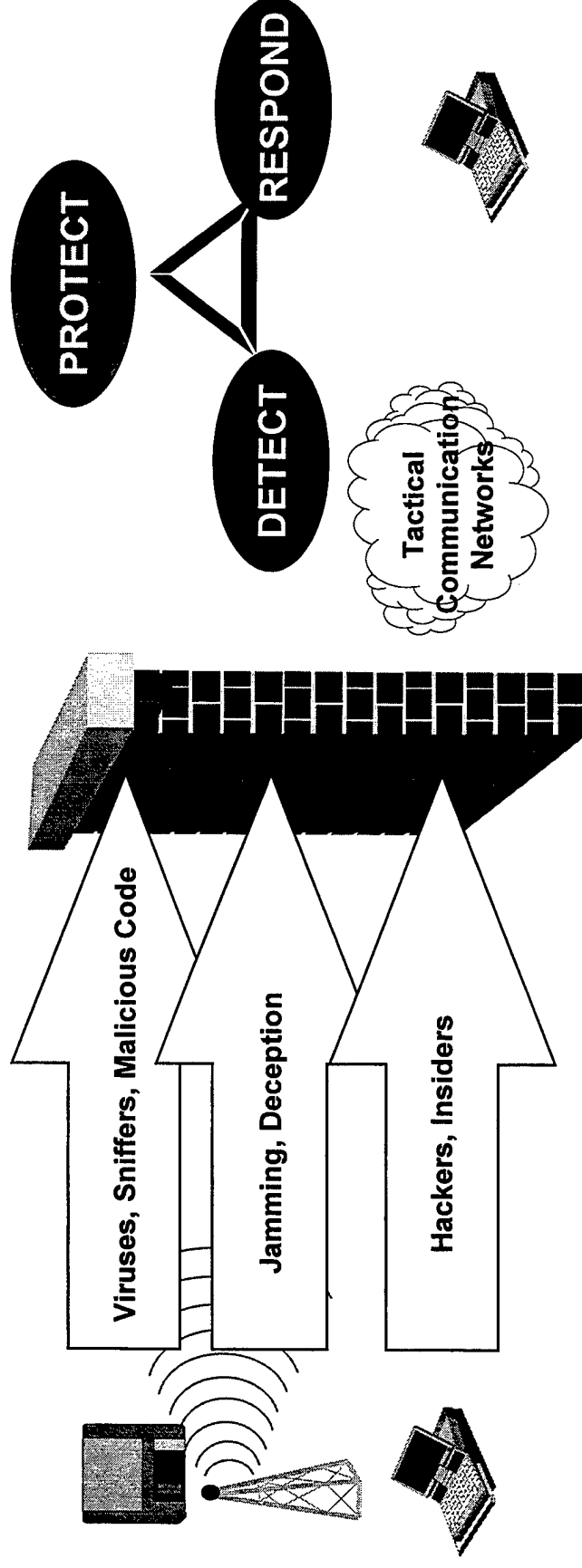


# TACTICAL C2 PROTECT ATD

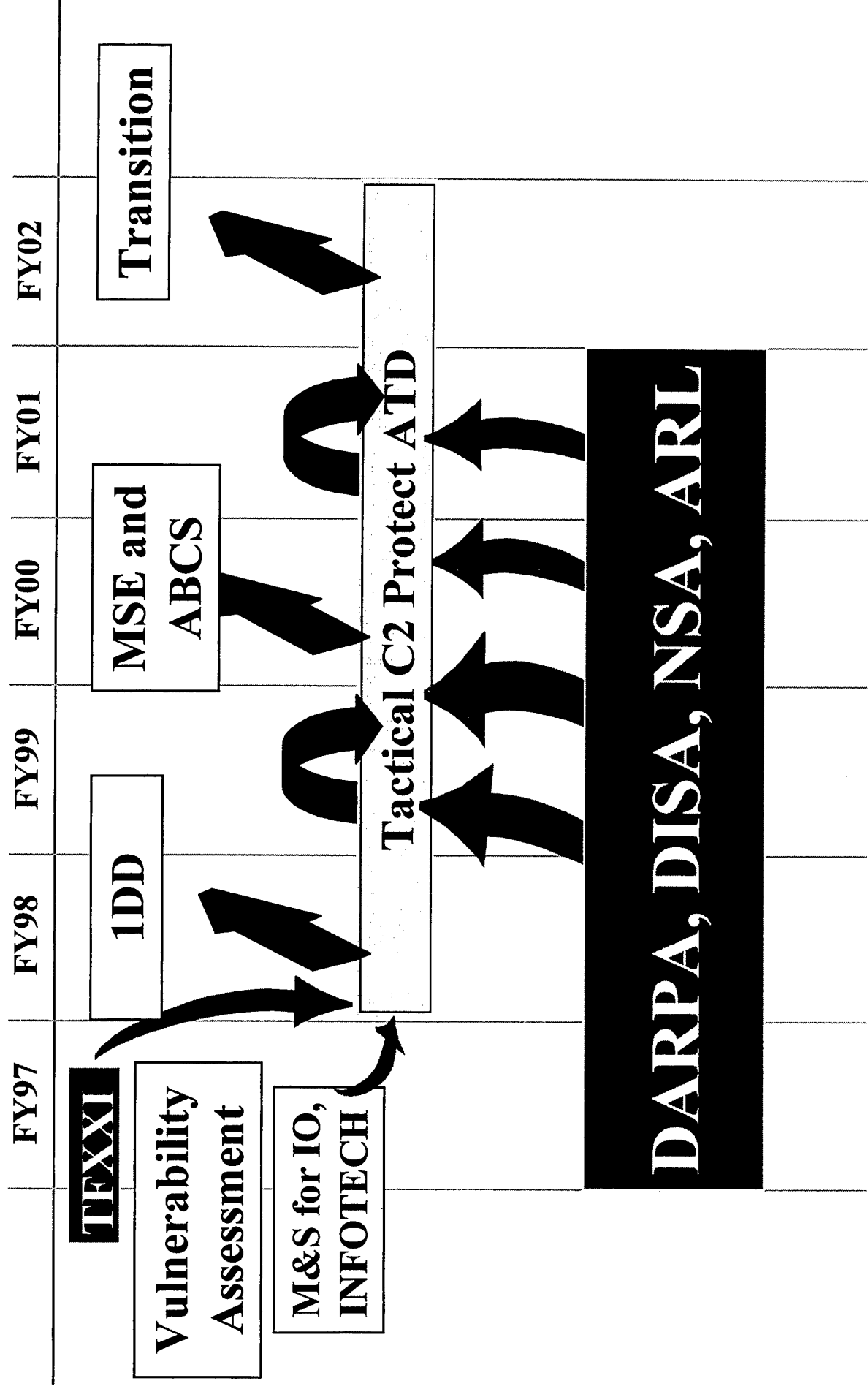
## OBJECTIVES

The objectives of the ATD are to Protect:

- The Tactical Internet
  - Brigade and Below Communications Systems and Networks (SINGARS, EPLRS)
- Army Common User Systems (MSE)
  - Gateways to higher echelons
- First Digitized Division
  - Host Systems and Networks
- Leverage information from interactive testing of protection systems for IO Attack applications in order to achieve information dominance



# TACTICAL C2 PROTECT ATD



# CONTRACTUAL OPPORTUNITIES

TITLE: Tactical C2 Protect

OBJECTIVE: Develop, integrate, and validate network access control, intrusion detection/ response, host level improvements, and security management that will secure the systems and networks of the First Digitized Division (FDD) and beyond.

CONTRACT TYPE: - CPFF (BAA Oct 97)

- Future Dual Use Application Programs

ESTIMATED VALUE: \$6.0-8.0M, 4 Year Effort

KEY MILESTONES: Award 1st Q of each FY, beginning with FY99 (Multiple awards NTE \$1M per year)

POC: Pete Van Syckle, S&TCD SPO, (732) 427-4647

ACQUISITION POC: Frank Caltabilota (732) 532-3832

# CONTRACTUAL OPPORTUNITIES

**TITLE:** Communication Exploitation Tools

**OBJECTIVE:** Assess existing tools/develop tools & techniques for demonstrating capability to exploit Command and Control Networks.

**CONTRACT TYPE:** CPFF (BAA Aug 99)

**ESTIMATED VALUE:** \$5.5 - \$6.0M, 3 Year Effort

## **KEY MILESTONES:**

- Awards 2QFY00/1QFY01 (multiple awards NTE \$1.0 M)
- Participation in laboratory/field test FY00-02

**POC:** Kevin Boyle, I2WD (732) 427-6526

**ACQUISITION POC:** Gloria Embury Jones (732) 427-1335





# NOTES



**JAMES R. WAGNER**  
**DEPUTY DIRECTOR, SOFTWARE ENGINEERING**

**UNCLASSIFIED**

AMSEL-SE-DD

POINT PAPER

SUBJECT: Software Engineering Center (SEC)

OBJECTIVE:

The CECOM Software Engineering Center was formed by combining the CECOM Software Engineering Directorate (SED), Information Software Support Center (ISSC), Logistics System Support Center (LSSC), and Industrial Logistics Systems Center (ILSC), and the Army's Center of Excellence for Software Engineering. This mission provides numerous opportunities for contractor participation in projects assigned to the SEC.

FACTS:

Life Cycle Software Engineering is committed to worldwide Army readiness providing support to C4IEW Mission Critical Defense Systems (MCDS) from initial system concept through development, production, deployment, and support of fielded systems.

Sustaining base systems include software intensive systems used in the retail logistics area as well as applications used in administration and personnel resources allocation. These systems were developed by the ISSC, headquarters at Fort Belvoir, VA.

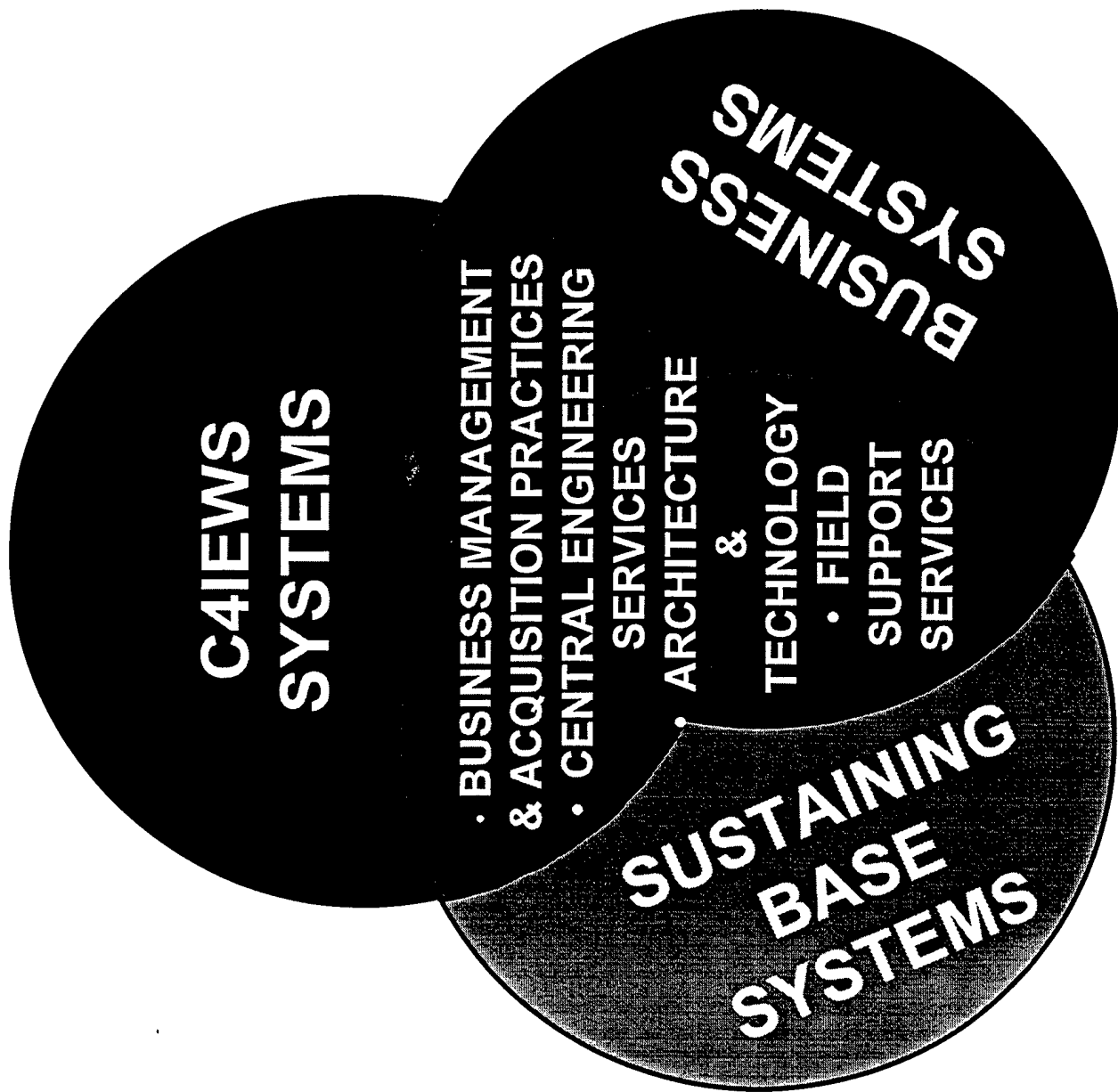
Business Systems include software utilized in Army Depot Operations and by the various Commodity Commands. These systems were developed by LSSC (St Louis, MI) and ILSC (Chambersburg, PA).

The SEC contractual program represents over 1900 man-years of support disbursed throughout the various locations maintained by SEC and approximately 450 software intensive systems in development through deployment. The value of the contractual program exceeds \$200 million per year. The SEC team comprised of military, civilian and contractor personnel, strives to provide quality support to the software engineering practices and constant improvement to the software development process.

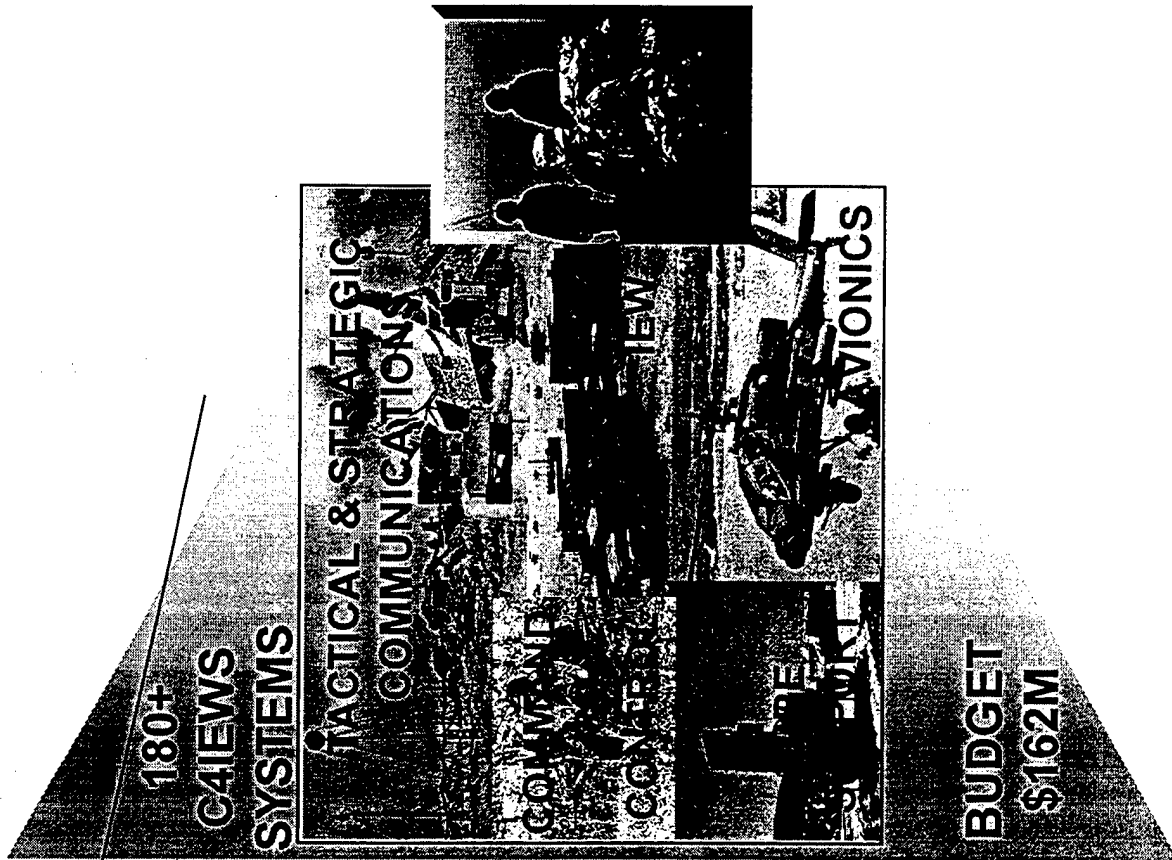
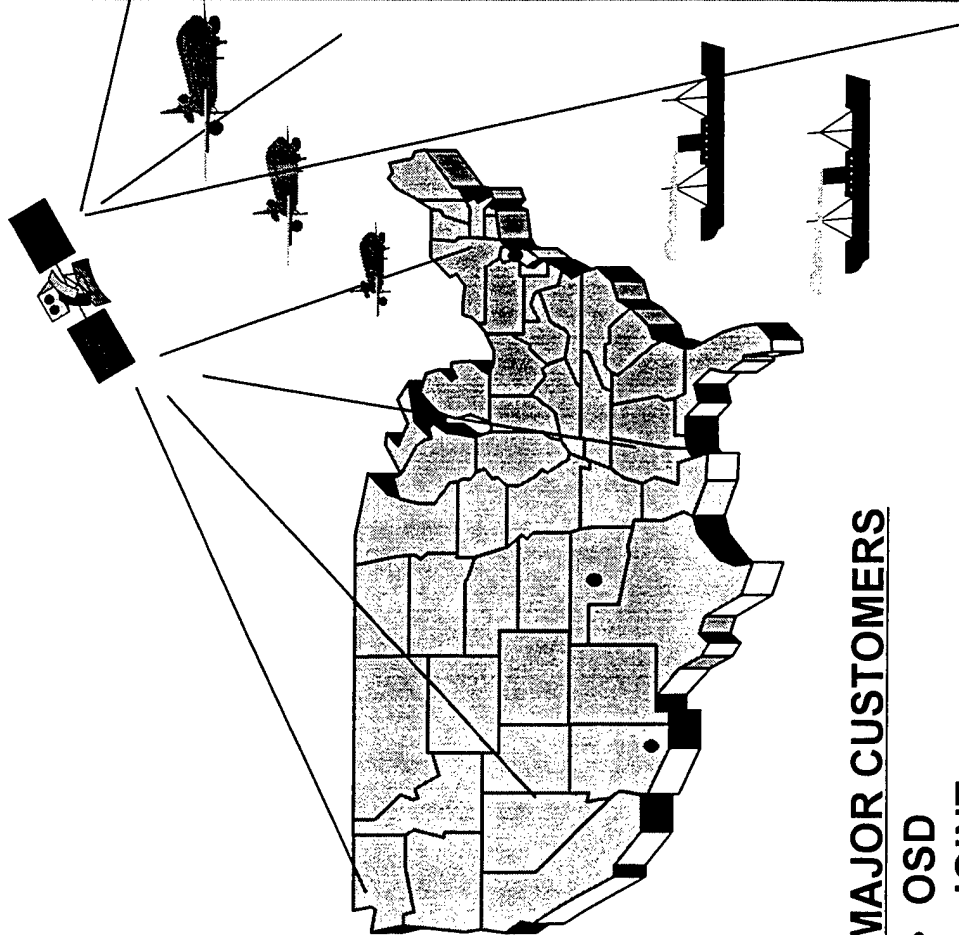
BRIEFER: James Wagner, Deputy Director, CECOM SEC, AMSEL-SE-DD, DSN 992-8205.

ACTION OFFICER  
Eugene J. Boyle  
Chief  
Contracts Group  
DSN 992-8220

# SEC SYSTEM AREAS



# C4IEWS SYSTEMS



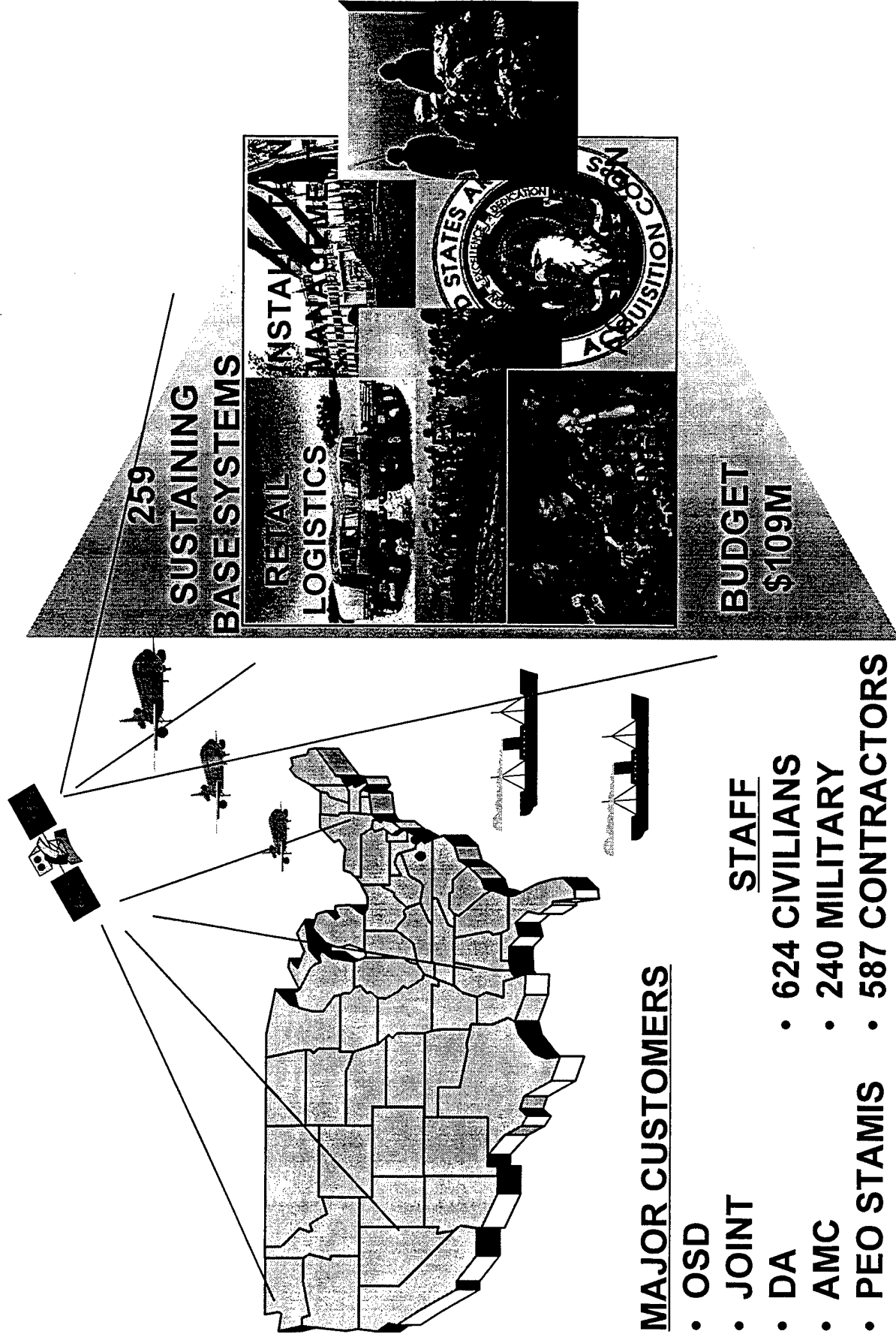
## MAJOR CUSTOMERS

- OSD
- JOINT
- DA
- AMC
- PEO C3 SYS
- PEO IEW
- PMs
- FIELD UNITS

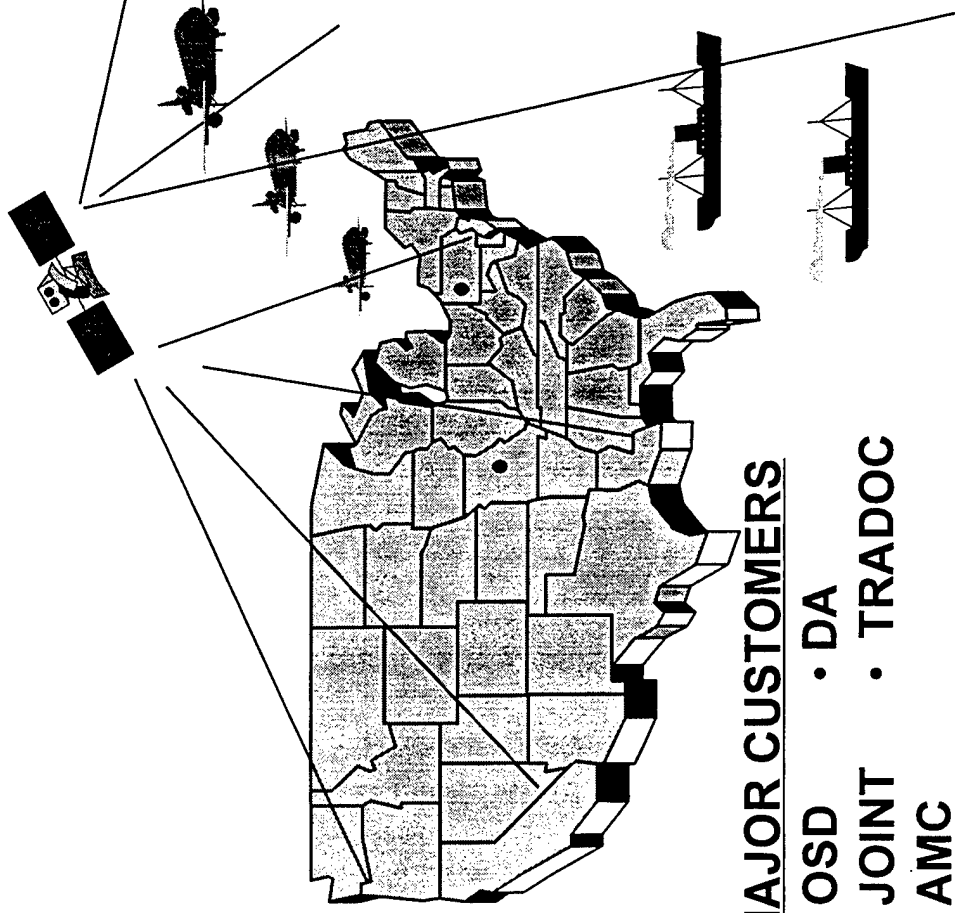
## STAFF

- 228 CIVILIANS
- 9 MILITARY
- 1200+ CONTRACTORS

# SUSTAINING BASE SYSTEMS



# BUSINESS SYSTEMS



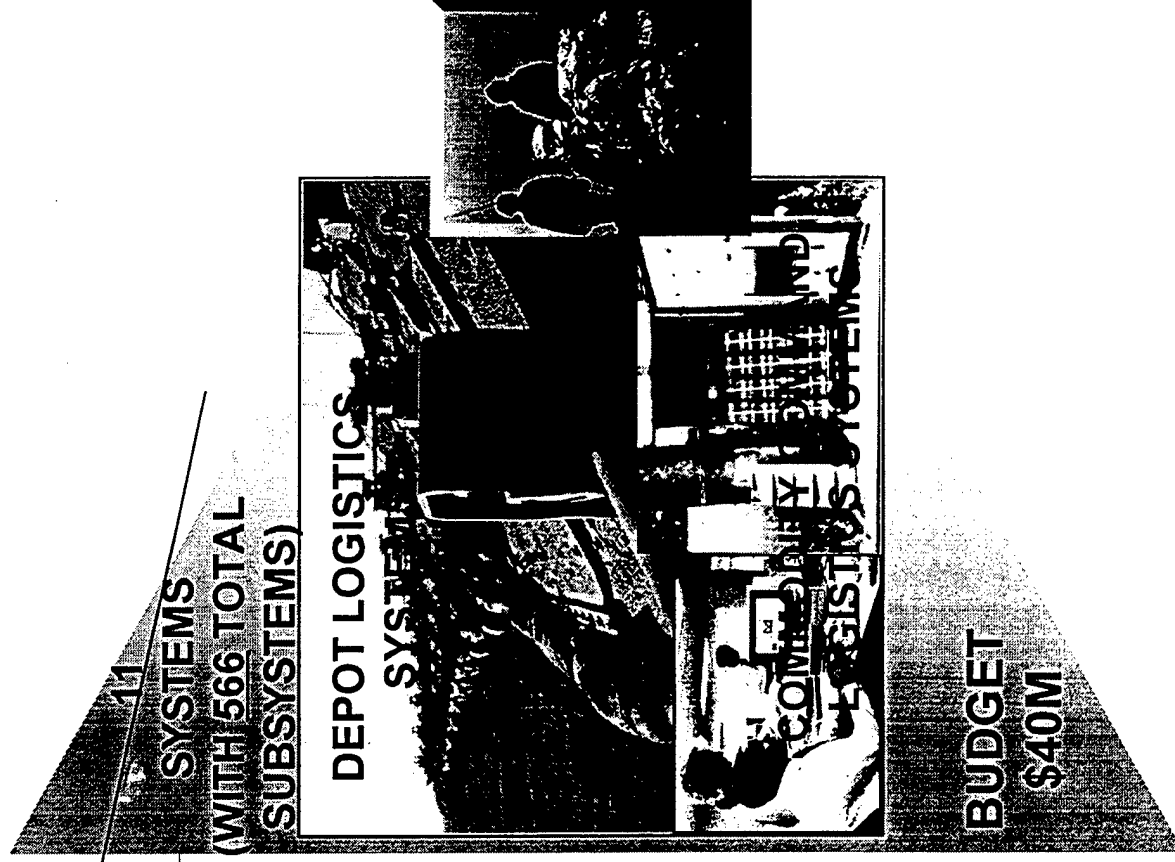
## MAJOR CUSTOMERS

- OSD • DA
- JOINT • TRADOC
- AMC

- DEPOTS
- AWR SITES
- ARSENALS
- MSCs
- LABS
- PROVING GROUNDS

## STAFF

- 513 CIVILIANS
- 0 MILITARY
- 113 CONTRACTORS



# CECOM SOFTWARE ENGINEERING CENTER

MISSION AREA	C4IEWS SYSTEMS	STANDARD ARMY SUSTAINING BASESYSTEMS	STANDARD AMC COMMODITY COMMAND SYSTEMS	STANDARD AMC DEPOT SYSTEMS	ALL
NUMBER OF SYSTEMS	180+	259	3 (CCSS HAS 539 SUBSYSTEMS)	8 (SDS HAS 27 SUBSYSTEMS)	450+
LINES OF CODE	42M	33M	9M	12M	96M
WORKFORCE	228 CIV 9 MIL 1200+ CONTR	624 CIV 240 MIL 587 CONTR	316 CIV 0 MIL 34 CONTR	197 CIV 0 MIL 79 CONTR	1365 CIV 249 MIL 1900+ CONTR
BUDGET	\$162M	\$109M	\$24M	\$16M	\$311M

INCLUDES, BY FAR,  
THE MAJORITY OF  
ALL ARMY SOFTWARE BUSINESS





# **SOFTWARE "JOB FACTS"**

- 200,000 - 400,000 IT PROFESSIONAL JOBS CURRENTLY VACANT IN U.S.
- BY 2006, 1 MILLION NEW JOBS TO BE CREATED
- IN 1995, ONLY 35,000 BS DEGREES AND 1,000 GRADUATE DEGREES WERE AWARDED
  - 1/5 ALL DEGREES GO TO FOREIGN NATIONALS
- IN 1996, AVERAGE PROGRAMMER EARNED \$66,500

**THE CHALLENGE IS FOR US AND OUR INDUSTRY  
PARTNERS TO  
COMPETE EFFECTIVELY IN THIS MARKETPLACE**

# CECOM SOFTWARE ENGINEERING CENTER SUMMARY OF CONTRACTOR OPPORTUNITIES

YEAR		AMOUNT
99 - 04	ARMY INTEROPERABILITY ENGINEERING	\$30-\$40M
99 - 04	SYSTEMS & SOFTWARE ENGINEERING FOR FIRE SUPPORT COMMAND CONTROL, FIRE DIRECTION & OTHER SYSTEMS	\$100-\$125M
99 - 04	JTACS SYSTEMS & SOFTWARE ENGINEERING SUPPORT FOR AN-TTC/ TYC-39 FAMILY OF SWITCHES	\$40-\$45M
00 - 05	MISSION CRITICAL DEFENSE SYSTEM MAINTENANCE	\$10-\$18M
00 - 05	DEPARTMENT OF THE ARMY SOFTWARE SUPPORT SERVICES-UMBRELLA 4 (DASSS-U4)	\$100-\$125M
00-05	SECURITY SUPPORT SERVICES	\$10-\$12M

# **CECOM SOFTWARE ENGINEERING CENTER CONTRACT OPPORTUNITY**

**TITLE:** ARMY INTEROPERABILITY ENGINEERING (AIE) --  
DEVELOPMENT, INTEGRATION, AND TECHNICAL  
SUPPORT

**OBJECTIVE:** CONTINUE THE DEVELOPMENT AND APPLICATION OF THE  
ARMY INTEROPERABILITY NETWORK (AIN) TEST CAPABILITY,  
INTEROPERABILITY STANDARDS & RELATED ACTIVITIES, TO  
SUPPORT THE DEVELOPMENT & SUSTAINMENT OF INTER-  
OPERABILITY FOR MISSION CRITICAL DEFENSE SYSTEMS.  
PROVIDE SPECIALIZED ENGINEERING & TECHNICAL EXPERTISE

**TYPE:** COMPETITIVE (UNRESTRICTED), IDIQ, TIME AND MATERIALS

**SCHEDULE:** RFP RELEASE - 3RD QUARTER FY98  
AWARD DATE - 1ST QUARTER FY99

**APPROXIMATE VALUE:** \$30-\$40M (5 YEARS)

**POC/TELEPHONE:** EUGENE J. BOYLE, 732-532-8220  
JOSEPH BRADY, CONTRACTING OFFICER, 732-532-5500

# **CECOM SOFTWARE ENGINEERING CENTER CONTRACT OPPORTUNITY**

**TITLE:**

LIFE CYCLE SYSTEMS AND SOFTWARE ENGINEERING  
SUPPORT FOR FIRE SUPPORT COMMAND, CONTROL,  
FIRE DIRECTION AND OTHER SYSTEMS, FT SILL, OK

**OBJECTIVE:**

PROVIDE SYSTEMS AND SOFTWARE ENGINEERING SERVICES  
IN SUPPORT OF THE DEVELOPMENT, PRODUCTION AND  
DEPLOYMENT OF THE FIRE SUPPORT COMMUNITY OF  
SYSTEMS INCLUDING SYSTEMS SUCH AS IFSAS, BATTERY  
COMPUTER SYSTEM (BCS), MULTIPLE LAUNCH ROCKET  
SYSTEM (MLRS), ADVANCED FIELD ARTILLERY TACTICAL  
DATA SYSTEMS (AFATDS)

**TYPE:**

COMPETITIVE (UNRESTRICTED), IDIQ, TIME AND MATERIALS

**SCHEDULE:**

RFP RELEASE - 3RD QUARTER FY98  
AWARD DATE - 1ST QUARTER FY99

**APPROXIMATE VALUE:** \$100-\$125M (5 YEARS)

**POC/TELEPHONE:**

EUGENE J. BOYLE, 732-532-8220  
DEBBIE SHREVE, CONTRACTING OFFICER, 732-532-2461

# **CECOM SOFTWARE ENGINEERING CENTER CONTRACT OPPORTUNITY**

**TITLE:** JTACS SYSTEMS AND SOFTWARE ENGINEERING SUPPORT  
FOR TACTICAL CIRCUIT/MESSAGE/PACKET SWITCHES

**OBJECTIVE:** THIS CONTRACT WILL PROVIDE SUPPORT IN THE CORRECTION  
OF SOFTWARE DEFECTS/DEFICIENCIES/ERRORS; & THE  
IMPLEMENTATION OF SOFTWARE REFINEMENTS & ENHANCE-  
MENTS TO THE OPERATIONAL AND SUPPORT SOFTWARE OF  
THESE PROGRAMS

**TYPE:** COMPETITIVE (UNRESTRICTED), IDIQ, TIME AND MATERIALS

**SCHEDULE:** RFP RELEASE - 1ST QUARTER FY99  
AWARD DATE - 3RD QUARTER FY99

**APPROXIMATE VALUE:** \$40-\$45M (5 YEARS)

**POC/TELEPHONE:** EUGENE J. BOYLE, 732-532-8220  
DEBBIE SHREVE, CONTRACTING OFFICER, 732-532-2461

# **CECOM SOFTWARE ENGINEERING CENTER CONTRACT OPPORTUNITY**

**TITLE:** MCDS HARDWARE MAINTENANCE AND TECHNICAL SUPPORT

**OBJECTIVE:** PROVIDE TECHNICAL SERVICES FOR HARDWARE  
MAINTENANCE AND SUPPORT OF ASSIGNED MCDSS AND  
ASSOCIATED EQUIPMENT AT FT MONMOUTH, NJ; FT SILL, OK;  
AND FT HUACHUCA, AZ

**TYPE:** COMPETITIVE (UNRESTRICTED), IDIQ, TIME AND MATERIALS

**SCHEDULE:** RFP RELEASE - 3RD QUARTER FY99  
AWARD DATE - 1ST QUARTER FY00

**APPROXIMATE VALUE:** \$10-\$18M (5 YEARS)

**POC/TELEPHONE:** EUGENE J. BOYLE, 732-532-8220  
DEBBIE SHREVE, CONTRACTING OFFICER, 732-532-2461

# **CECOM SOFTWARE ENGINEERING CENTER CONTRACT OPPORTUNITY**

**TITLE:** DEPARTMENT OF THE ARMY SOFTWARE SUPPORT SERVICES-  
UMBRELLA 4 (DASSS-U4)

**OBJECTIVE:** PROVIDE FOR THE ACQUISITION OF NONPERSONAL SW  
SUPPORT - SUPPORT SERVICES TO INCLUDE SOFTWARE  
COMMUNICATIONS, SYSTEMS DESIGN & ANALYSIS, SW  
DEVELOPMENT, TESTING, & MAINTENANCE, CONFIGURATION  
MANAGEMENT, RISK MANAGEMENT AND ECONOMIC ANALYSIS

**TYPE:** COMPETITIVE (UNRESTRICTED), IDIQ, TIME AND MATERIALS

**SCHEDULE:** PROJECTED - RFP RELEASE - 2ND QUARTER FY00  
AWARD DATE - 3RD QUARTER FY00

**APPROXIMATE VALUE:** \$100-\$125M (5 YEARS)

**POC/TELEPHONE:** ROBERT F. BARB, 703-806-4172  
PEGGY BUTLER, CONTRACTING OFFICER, 703-325-2858



# **CECOM SOFTWARE ENGINEERING CENTER CONTRACT OPPORTUNITY**

**TITLE:** SECURITY SUPPORT SERVICES

**OBJECTIVE:** PROVIDE SECURITY SUPPORT IN THE AREAS OF PERSONNEL SECURITY, PHYSICAL SECURITY, COMMUNICATIONS SECURITY, INFORMATION SYSTEMS SECURITY, ELECTRONICS SECURITY, OPERATIONS SECURITY, MONITORING OF SPECIAL ACCESS PROGRAM, MANAGEMENT OF SENSITIVE COMPARTMENTED INFORMATION BILLETS AND FACILITIES AND THE CONDUCT OF SECURITY EDUCATION AT FT MONMOUTH, NJ; FT SILL, OK; FT HUACHUCA, AZ; AND OTHER CECOM FACILITIES AS REQUIRED

**TYPE:** COMPETITIVE (UNRESTRICTED), IDIQ, TIME AND MATERIALS

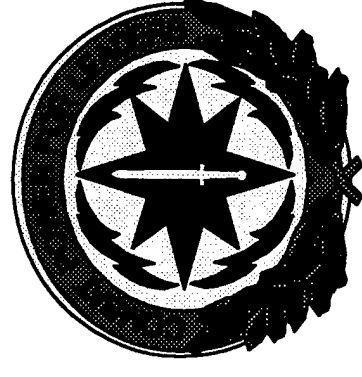
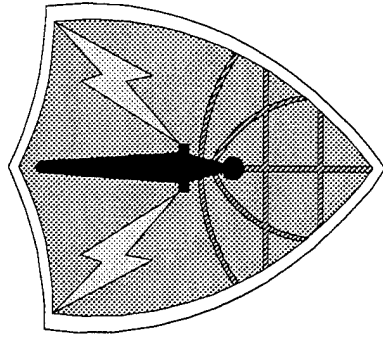
**SCHEDULE:** RFP RELEASE - 3RD QUARTER FY99  
AWARD DATE - 1ST QUARTER FY00

**APPROXIMATE VALUE:** \$10M-\$12M (5 YEARS)

**POC/TELEPHONE:** EUGENE BOYLE, 732-532-8220  
DEBBIE SHREVE, CONTRACTING OFFICER, 732-532-2461



# NOTES



**ISFC**

# **CONTRACT OPPORTUNITIES**

**COLONEL ALFRED J. ESTRELLA**

**COMMANDER  
INFORMATION SYSTEMS ENGINEERING  
COMMAND**

**UNCLASSIFIED**

27 Apr 98

## POINT PAPER

SUBJECT: Integration, Training and Technical Support Services Contract

OBJECTIVE: The ITTSS Contract will enhance Army information systems integration with commercial off-the-shelf hardware and software. It will also provide leading edge information systems training and information systems engineering support.

## FACTS:

- The ITTSS contract will provide academia the opportunity to respond to government areas of interest in the form of scientific and exploratory studies, research, investigations, training and technical support.
- Emphasis will be on analyzing requirements, design criteria, performance standards, and engineering concepts.
- DOD must have access to scientific expertise in an academic environment to advance state-of-the-art information systems technologies.
- Milestones listed below reflect the planned schedule for ITTSS:
  - RFP Release                      3d QTR - FY 98
  - Contract Award                4TH QTR - FY 98
- This will be a best value, Indefinite Delivery/Indefinite Quantity procurement, and consist of a base year and 4 option years.

BRIEFER: COL Alfred J. Estrella, Commander, US Army  
Information Systems Engineering Command. AMSEL-IE-HQ, (520)  
538-6626.

Technical Representative  
CPT Robert Olsen  
Technology Integration Center  
(520) 533-3600

27 Apr 98

## POINT PAPER

SUBJECT: Information Mission Area Engineering and Technical Support Services (IMA III)

OBJECTIVE: The IMA III Contract will enhance Army information systems engineering services and improve USAISEC's ability to respond to customer requirements. Specifically it will provide Information Mission Area systems engineering, systems integration, systems analysis, technical, test and installation support worldwide.

## FACTS:

- Systems engineering will be used to translate functional requirements and performance objectives into design criteria and specifications for system elements.
- The IMA III contract will provide engineering services using a main element at Fort Huachuca and field offices at Fort Detrick, Maryland, the National Capitol Region, Worms, Germany, and Fort Shafter, Hawaii.
- Milestones listed below reflect the planned schedule for ITTSS:
  - RFP Release                      1st QTR - FY 99
  - Contract Award                4TH QTR - FY 99
- This will be a best value, Indefinite Delivery/Indefinite Quantity procurement, and consist of a base year plus 4 option years.

BRIEFER: COL Alfred J. Estrella, Commander, US Army  
Information Systems Engineering Command. AMSEL-IE-HQ, (520)  
538-6626.

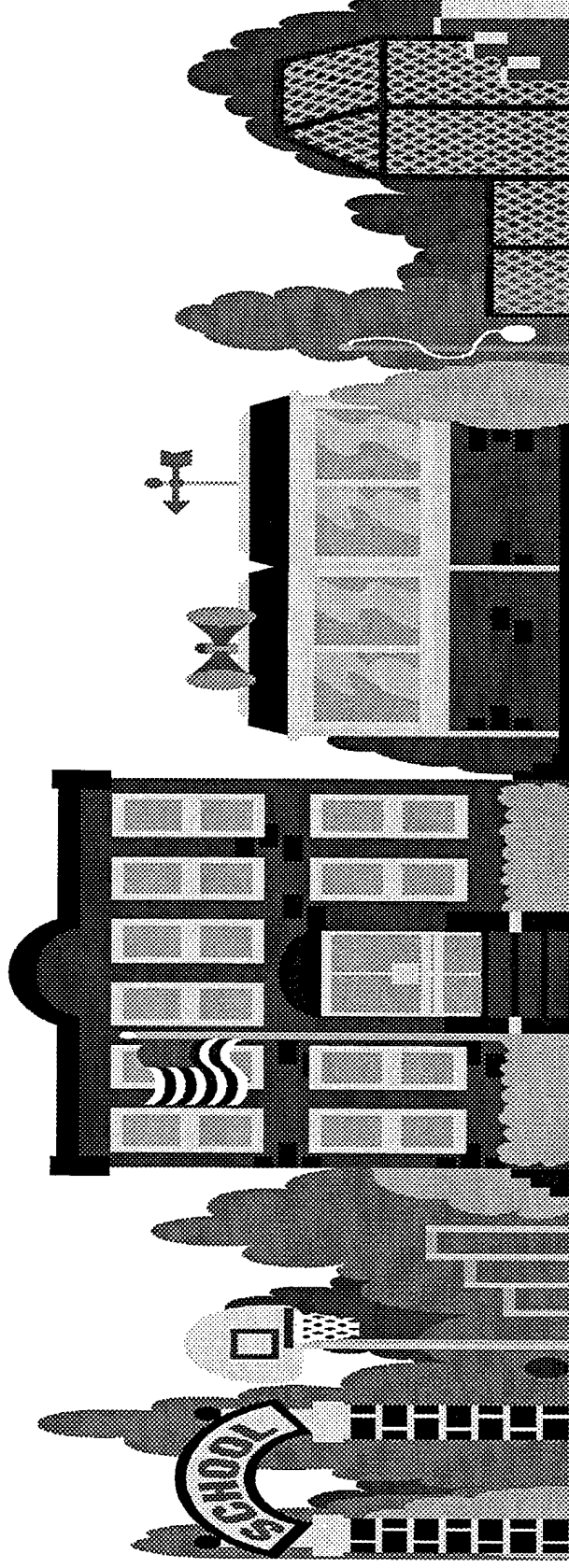
Technical Representative  
Ms. Suzanne Dana  
Transmission Systems Directorate  
(520) 538-3045

# **CONTRACT OPPORTUNITIES**

- **INTEGRATION, TRAINING AND  
TECHNICAL SUPPORT SERVICES**

- **INFORMATION MISSION AREA  
ENGINEERING SERVICES AND  
TECHNICAL SUPPORT**

# INTEGRATION, TRAINING AND TECHNICAL SUPPORT SERVICES



# **PROGRAM DEFINITION**

- **TYPES OF SERVICES**
- **CUSTOMER BASE**
- **BROAD IN SCOPE**



# **PROGRAM STATUS**

- **CURRENT CONTRACT WITH HOWARD UNIVERSITY EXPIRED FEBRUARY 1998**
- **NEW STATEMENT OF WORK APPROVED  
MAR 98**
- **REQUEST FOR PROPOSAL PROJECTED  
RELEASE DURING 3D QTR FY 98**
- **CONTRACT AWARD PROJECTED 4TH QTR  
FY 98**

# **CONTRACT REQUIREMENTS**

- **PROVIDE SCIENTIFIC EXPERTISE IN AN ACADEMIC ENVIRONMENT**
- **INVESTIGATE THE FEASIBILITY OF SOLUTIONS USING A VARIETY OF TOOLS INCLUDING MODELING AND SIMULATION**
- **PROVIDE TRAINING IN LEADING EDGE INFORMATION SYSTEMS TECHNOLOGY**
- **IDENTIFY AND ADDRESS TECHNICAL CHALLENGES**

# **SUMMARY**

**TITLE: INTEGRATION, TRAINING AND TECH SUPPORT SERVICES**

**OBJECTIVE: ENHANCE INFORMATION SYSTEMS INTEGRATION, OBTAIN LEADING EDGE TRAINING, AND PROVIDE ADDITIONAL ENGINEERING SUPPORT FOR ARMY INFORMATION SYSTEMS**

## **KEY MILESTONES:**

**PROJ RFP - 3D QTR FY 98**

**PROJ AWARD - 4TH QTR FY 98**

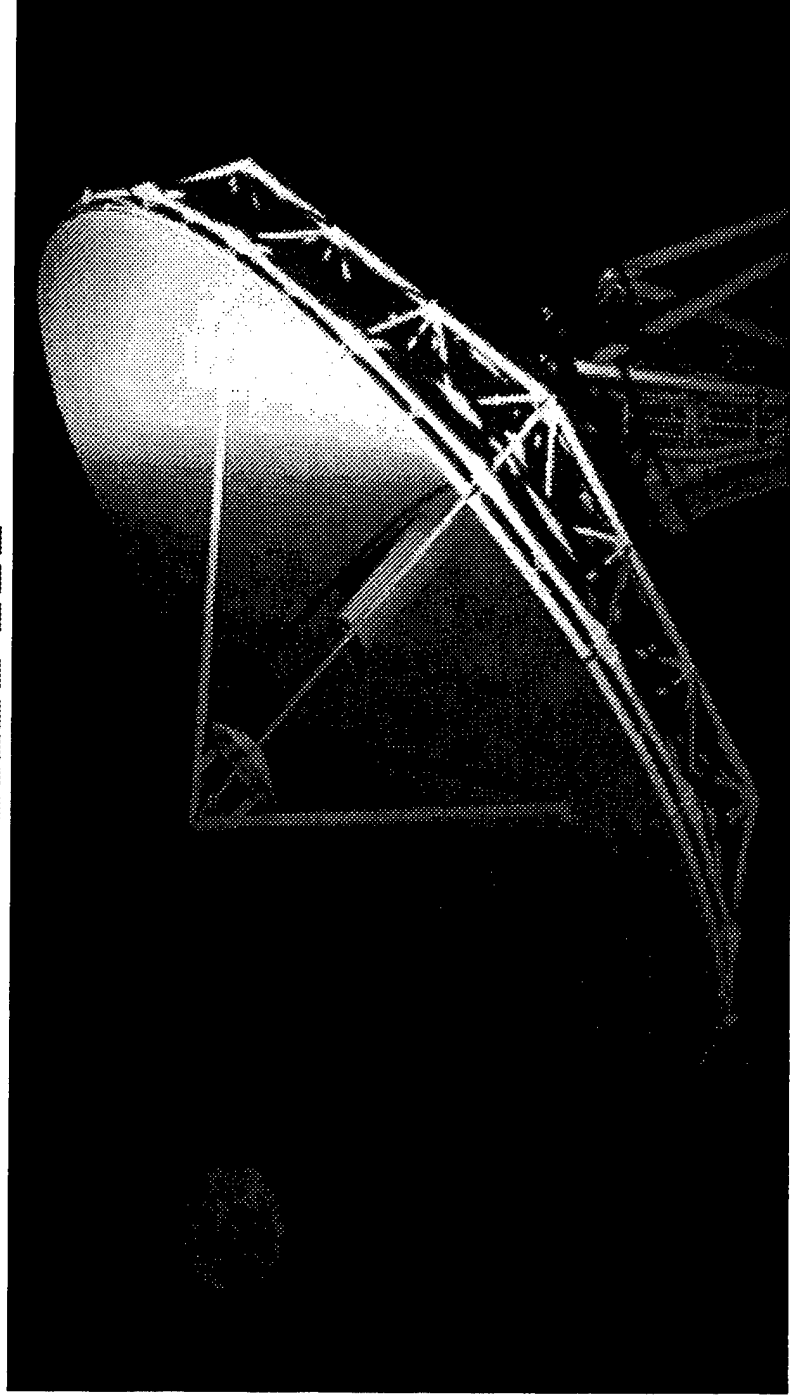
**ESTIMATED VALUE: \$25 - \$30M (5 YEARS)**

**TECHNICAL POC: CPT ROBERT OLSEN (520) 533-3600**

**CONTRACT POC: MS. HILDEGARD CHOATE (520) 538-7240**

# INFORMATION MISSION AREA

## IMA III



# **PROGRAM DEFINITION**

- **PROVIDE IMA SYSTEMS ENGINEERING, INTEGRATION, ANALYSIS, TECHNICAL SUPPORT, TRAINING, AND INSTALLATION**
- **SUPPORTS THE USACECOM AND USAISEC CUSTOMER BASE THROUGHOUT THE WORLD**
- **PROVIDERS CUSTOMERS A TOTAL SUPPORT PACKAGE AND CUSTOMIZED SOLUTIONS**

# **PROGRAM STATUS**

- **CURRENT IMA II CONTRACT EXPIRES  
DEC 99**

- **IMA III CONTRACT STATEMENT OF  
WORK COMPLETED AND UNDER FINAL  
REVIEW**

- **PROJECTED REQUEST FOR PROPOSAL  
RELEASE - 1ST QTR FY 99**

- **PROJECTED AWARD - 4TH QTR FY 99**

# CONTRACT REQUIREMENTS

- PERFORM SYSTEMS ENGINEERING
- EMPLOY SYSTEMS INTEGRATION TECHNIQUES
- PERFORM DETAILED ENGINEERING TO PRODUCE SOLUTIONS
- INSTALL ALL SYSTEM COMPONENTS
- PREPARE TEST DOCUMENTATION AND PARTICIPATE IN TESTS, INSPECTIONS AND EVALUATIONS
- PROVIDE TECHNICAL INSTRUCTION, DRAFTING & ILLUSTRATION SUPPORT

# **SUMMARY**

**TITLE: INFORMATION MISSION AREA (IMA III)**

**OBJECTIVE: PROVIDE INFORMATION SYSTEMS  
ENGINEERING AND TECHNICAL SUPPORT SERVICES**

## **KEY MILESTONES:**

**PROJ RFP - 1ST QTR FY 99**

**PROJ AWARD - 4TH QTR FY 99**

**ESTIMATED VALUE: \$300 - \$350M (5 YEARS)**

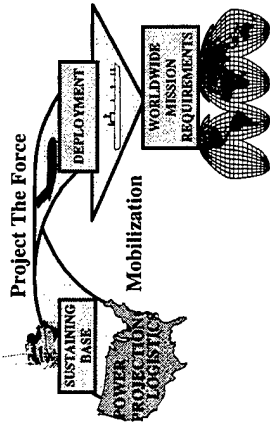
**TECHNICAL POC: MS. SUSANNE DANA (520) 538-3045**

**CONTRACT POC: MR. HANK SPEAKMAN (520) 538-8248**





# NOTES



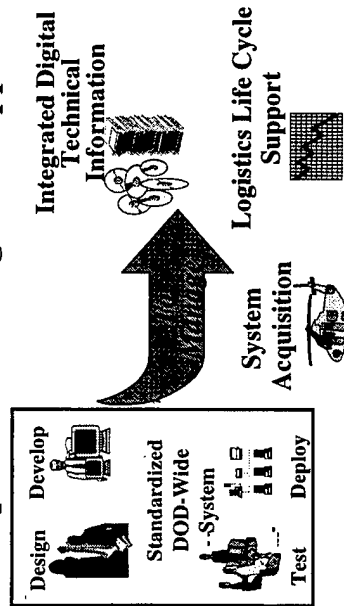
Sustain The Force

Transportation Management  
Sustaining Base Automation  
Global Messaging

MTS



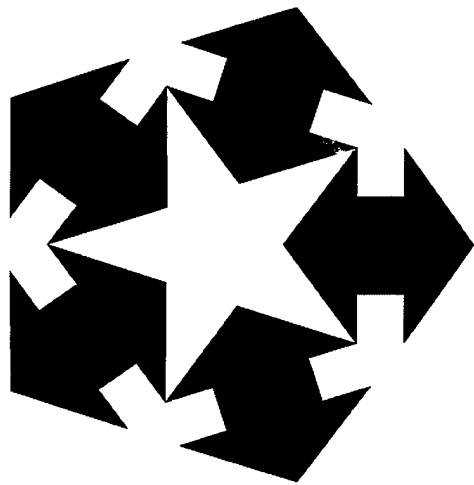
Joint Acquisition and Logistics Support



JCALs

# PEO STAMIS OPPORTUNITIES

PEO STAMIS



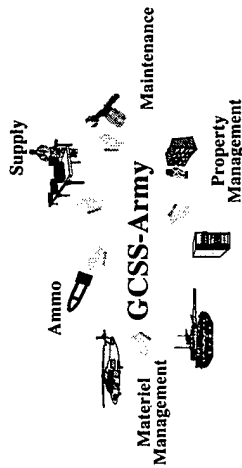
Supporting the Warfighter  
with Effective/Efficient  
Combat Service Support



AIT

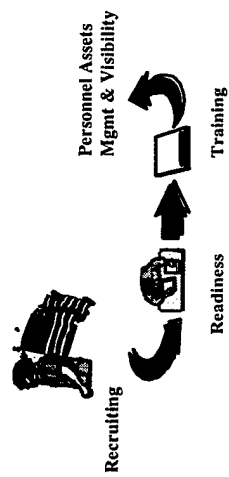
Identification  
Technology

Logistics Systems



CSS Strategic/Tactical Support

Personnel Management Systems



Distance Learning

Ms. Mary Kelly  
Deputy PEO STAMIS

UNCLASSIFIED

**POINT PAPER**

**SUBJECT:** Program Executive Officer, Standard Army Management Information Systems (PEO STAMIS) Opportunities to be presented at the May 1998 Advanced Program Briefing for Industry (APBI) Conference at Fort Monmouth, New Jersey.

**OBJECTIVE:** The PEO STAMIS Mission is to Acquire, Field and Sustain Key Combat Service Support (CSS) Information Systems to meet the Army's Force XXI objectives. Four Program Opportunities will be presented at the May 1998 APBI Conference:

- Movement Tracking System (MTS).
- STAMIS Computer Contract, Release III (SCC-III).
- Joint Computer-Aided Acquisition & Logistics Support (JCALS).
- Automatic Identification Technology, release II (AIT II).

**FACTS:***1. MTS Program:*

Overview: The MTS Program provides the capability for Users to identify/track the position and movements and communicate with Tactical Wheeled Vehicle Operators in order to provide positive control of common-user land transportation. This system incorporates the technologies of satellite based Global Positioning System (GPS), AIT, Mapping systems, and Non-Line of Sight Communications. The MTS system will comply with Joint Technical Architecture (JTA), Y2K, and Open Architecture Standards. Funding approval and authority has been received for implementation in palletized load vehicles and other tactical wheeled vehicles.

Opportunity: Procurement of Commercial-of-the-Shelf (COTS) System Hardware (Hand-held, Vehicle-mounted and Control Station equipment), System Software (System operations, Mapping and Data Messaging) Support Services will include satellite airtime and system fielding (installation/integration, training, maintenance). Indefinite Delivery/Indefinite Quantity (IDIQ) Contract Milestones:

- \*RFP Release - Jun/Jul 98.
- \*Contract Award - Sep 98.
- \*Contract Value - \$300-400 Million.

*2. SCC Program:*

Overview: SCC III is a follow-on IDIQ contract capability to an existing SCC II contract awarded in Oct 97. This program provides for the acquisition of COTS microcomputer hardware and related system software and support services for CSS functional areas. SCC-II program supports both STAMIS and Non-STAMIS applications. SCC-III is expected to be in-place during Year 2003 and will accommodate available technologies and support Army requirements at the conclusion of the current SCC-II contract.

Opportunity: Procurement of COTS hardware/software and support services for Army Information System Programs. Systems will comply with JTA, Y2K and Open Architecture Standards. Hardware includes Desktop/Laptop computers, Servers, and Peripherals. Software includes operating system packages and system communications. Support Services include system fielding support (surveys, installation/integration/maintenance, and special studies).

IDIQ Contract Milestones: \*RFP Release - 3Q FY 2002.

\*Contract Award: 1Q03.

**\*Contract Value: \$500-700M.**

### 3. JCALS Program:

**Overview:** JCALS provides digital environments to automate the management of life-cycle support for weapon systems and other acquisition programs. JCALS applications include Data Management concepts, technical documentation automation, and materiel acquisition management applications. This program provides for hardware/software architectures (JTA/COE and C2 compliant) and support concepts for the Joint military services. Limited capability of the Joint Technical Manual is expected during FY 98, full capability in FY 99, and over 400 sites fielded by 2004. JCALS infrastructures were initially deployed in FY96, with 14,000 users at 47 sites, and an expectation of 30,000 users during system life cycle out to 2014.

**Opportunity:** Acquisition of COTS hardware (client-server systems with peripherals), related software (operating systems, communications, office automation, security), and support services (system fielding/integration, site preparation, and communications systems upgrades/installation). The JCALS system will comply with JTA, Y2K and Open Architecture Standards.

### IDIQ Contract Milestones:

COTS acquisition (Firm Fixed Price):

- \*Draft RFP - 4Q00; Final RFP - 1Q01.
- \*Contract Award - 2Q01.
- \*Contract Value - \$20-50M.

Site Preparation (Time and Materials) : \*Draft RFP - 4Q99; Final RFP - 1Q00.  
\*Contract Award - 2Q00.  
\*Contract Value - \$5-10M.

#### 4. AIT Program:

**Overview:** AIT provides an IDIQ contract capability for acquisition of automated equipment to provide for the capture/collection of logistical data. This includes Issue, Receipt, Turn-in, Inventory, Storage and Shipment of materiel. AIT equipment is currently being fielded to STAMIS and Non-STAMIS programs via the existing AIT I contract awarded in Mar 94 and a RFID contract in Aug 97. The AIT II Contract will be a follow-on procurement identity for COTS hardware, software and support services.

**Opportunity:** Procurement of COTS hardware/software and support services for AIT implementation. Hardware for this CSS Enabling Technology will include Portable Data Collection systems, Bar Code systems (scanners, readers, printers), Voice Recognition Data Collection Terminals, and Wireless Radio Frequency Networks. Software includes Bar Code applications and Data Collection programs. Support Services include site surveys, equipment fielding, and system integration.

### IDIQ Contract Milestones:

\*RFP Release - Aug 98.  
\*Contract Award - Dec 98.  
\*Contract Value: \$150-250M.

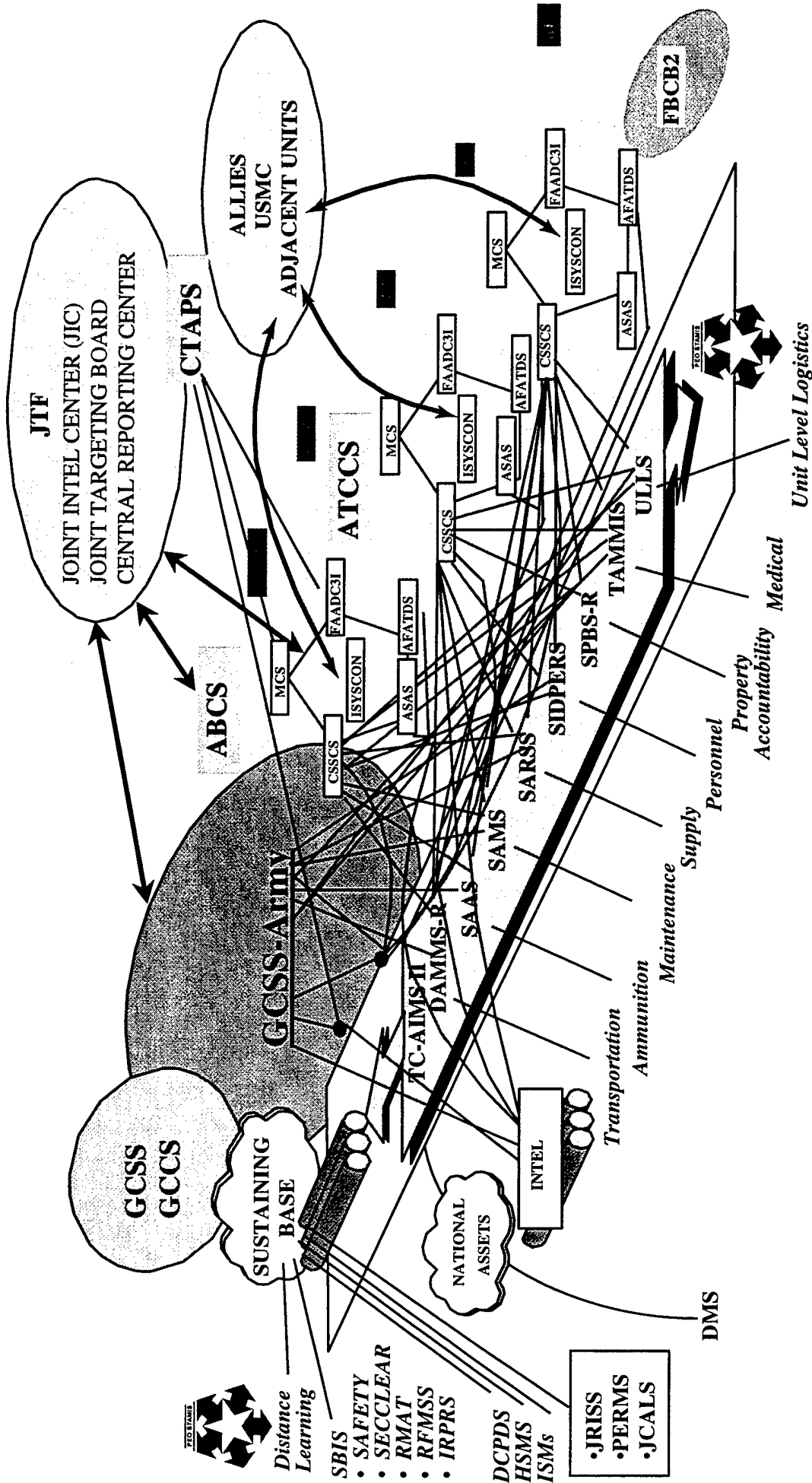
**BRIEFER:** Ms. Mary Kelly, Deputy PEO STAMIS, DSN 656-4200, Email: [kellym@peostamis.belvoir.army.mil](mailto:kellym@peostamis.belvoir.army.mil)

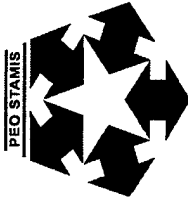
MARY D. KELLY  
Deputy PEO STAMIS



# WHAT IS UNDER PEO STAMIS MANAGEMENT

## Critical Combat Service Support Systems





**PROGRAM EXECUTIVE OFFICER  
STANDARD ARMY MANAGEMENT INFORMATION  
SYSTEMS  
(PEO STAMIS)**

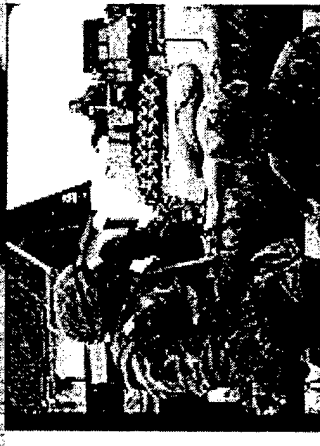
**MISSION**

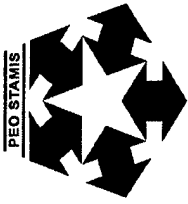
- ***ACQUIRE / FIELD / SUSTAIN KEY  
ARMY INFORMATION SYSTEMS***
- ***MANAGE INFORMATION SYSTEMS  
TO MEET THE ARMY'S POWER  
PROJECTION GOALS***

**OUR CUSTOMER**



- ***LEVERAGE BUSINESS PROCESS  
IMPROVEMENTS AND KEY  
ENABLING TECHNOLOGIES TO  
ENHANCE READINESS***

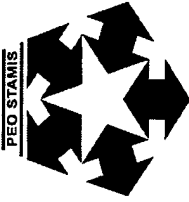




# **MOVEMENT TRACKING SYSTEM (MTS)**

## **SYSTEM DEFINITION**

- **MTS PROVIDES:**
  - **The Capability to Identify Position, Track Progress, and Communicate with Tactical Wheeled Vehicle Operators**
  - **A Satellite-Based Tracking & Communications System**
  - **Positive Control of common user Land Transport Assets**
  - **The Ability To Protect, Divert, Reroute Assets/Supplies**
  - **The Incorporation of Global Positioning System (GPS), Automatic Identification Technology (AIT), Mapping Technologies and Non-Line-of-Sight Communications**
- **MTS WILL BE USED TO SUPPORT BOTH PEACETIME MISSIONS AND WARTIME OPERATIONS**

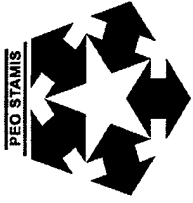


# **MOVEMENT TRACKING SYSTEM**

## **SYSTEM STATUS**

- **APPROVED OPERATIONAL REQUIREMENTS DOCUMENT (ORD)**
- **INITIAL AUTHORITY AND FUNDING OBTAINED FOR MTS ON PALLETIZED LOAD SYSTEM VEHICLES**
- **ADDITIONAL AUTHORITY AND FUNDING OBTAINED FOR OTHER TACTICAL WHEELED VEHICLES**
- **FINALIZING RFP/SOW FOR MTS CONTRACT AWARD**
- **5 Year IDIQ Contract**
- **3 Additional Years for Technical Support & Maintenance**





# **MOVEMENT TRACKING SYSTEM REQUIREMENTS**

## **•SATELLITE BASED TRACKING SYSTEM**

- Hand-Held Mobile Unit
- Vehicle Mounted Mobile Unit
- Control Station

## **•WORLDWIDE ENVIRONMENT**

- Tactical And Non-Tactical/Garrison Operations

## **•JOINT TECHNICAL ARCHITECTURE (JTA), Y2K and OPEN ARCHITECTURE COMPLIANT SYSTEM**

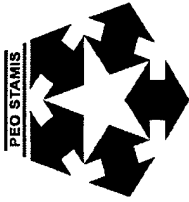
- JTA Compliant Operating System
- Mapping and Data Messaging Software

## **•SYSTEM SUPPORT SERVICES:**

- Satellite Air Time
- Installation, Training and Maintenance

## **•PLANNED IMPROVEMENTS:**

- RF Tag Interface, Vehicle Diagnostics



## CONTRACT OPPORTUNITY

- **MOVEMENT TRACKING SYSTEM (MTS)**
- **OBJECTIVE:** To Procure Movement Tracking System Commercial Off-The-Shelf (COTS) Hardware, Software, and Support Services for Tactical Wheeled Vehicle Programs
- **PROPOSED CONTRACT TYPE:**  
Indefinite Delivery/Indefinite Quantity (IDIQ)
- **KEY MILESTONES:**

**RFP Release:** June/July 1998

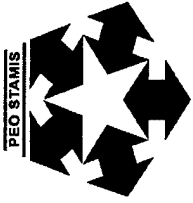
**Contract Award:** August/September 1998

• **ESTIMATED VALUE:** \$300 - 400 Million

• **POC NAMES/TELEPHONE NUMBERS:**

**PM MTS - Mr. Herb Andresen, (804) 734-6047**

**KO - Mr. Kevin Sommer, (703) 325-3346**



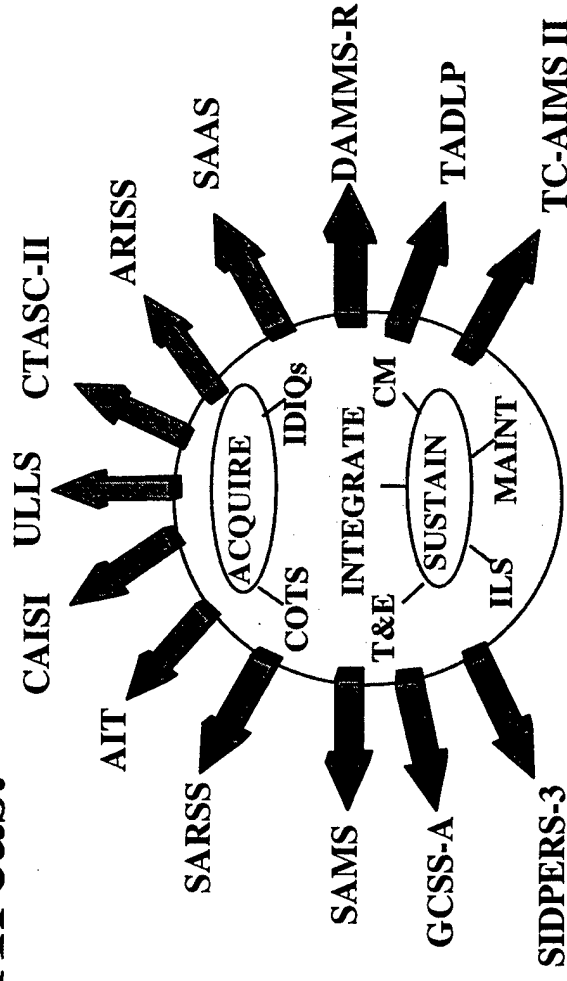
# STAMIS COMPUTER CONTRACT (SCC-III)

## SYSTEM DEFINITION

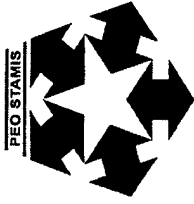
### •SCC-III PROVIDES:

- An IDIQ Contract Capability to Acquire COTS Microcomputer Systems for Combat Service Support Logistics (Transportation, Supply, and Maintenance) and Personnel Functional Areas.

### •SCC-III SUPPORTS BOTH STAMIS and NON-STAMIS APPLICATION SOFTWARE



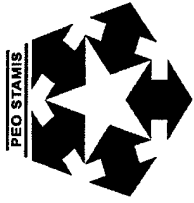
CURRENTLY SUPPORTED  
FUNCTIONAL COMMUNITIES



# STAMIS COMPUTER CONTRACT

## STATUS

- **CURRENT SCC-II CONTRACT AWARDED IN OCT 97**
- **5 YEAR IDIQ CONTRACT**
  - Notebooks (Basic and Multimedia, Both - 166 Mhz)
  - Desktop - 233 Mhz
  - Servers (Low End - 233 Mhz, High End - 266mhz)
  - Software
  - Support Services
  - 3 Additional Years On Tech Support & Maintenance
  - Not To Exceed - \$470 Million
- **SCC-III**
  - Projected for Year 2003 Award
  - Contract will be structured to accommodate the Available Technologies and the Needs of the Army at the conclusion of the current SCC-II Contract



# STAMIS COMPUTER CONTRACT

## REQUIREMENTS

### •COMMERCIAL, STATE-OF-THE-ART TECHNOLOGY AT CLOSURE OF THE SCC-II CONTRACT

- Hardware: Desktops, Laptops, Servers, Peripherals
- Software: Operating Systems, Communications
- Support Services: Site Surveys, Integration, Studies

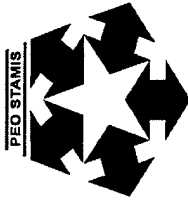
### •OPERATIONAL ENVIRONMENTS

- Tactical and Non-Tactical
- Worldwide

### •IN SUPPORT OF

- Current Army STAMIS Community Programs
- Projections for New Army STAMIS Programs

### •JOINT TECHNICAL ARCHITECTURE (JTA), Y2K and OPEN ARCHITECTURE COMPLIANT SYSTEMS



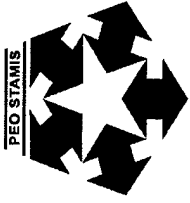
## CONTRACT OPPORTUNITY

- **STAMIS COMPUTER CONTRACT (SCC III)**
- **OBJECTIVE:** To Acquire State-of-the-Art, Commercial Off-The-Shelf Hardware, Software and Support Services for Standard Army Management Information Systems
- **PROPOSED CONTRACT TYPE:**  
Indefinite Delivery/Indefinite Quantity (IDIQ)
- **KEY MILESTONES:**

**RFP Release: 3Q FY 2002**

**Contract Award: 1Q FY 2003**

- **ESTIMATED VALUE: \$500 -700 Million**
- **POC NAMES/TELEPHONE NUMBERS:**  
**PO STACOMP - Mr. Bob Bradley, (703) 806-3956**  
**Acquisition POC - N/A**



# **JOINT COMPUTER-AIDED ACQUISITION AND LOGISTICS SUPPORT (JCALS)**

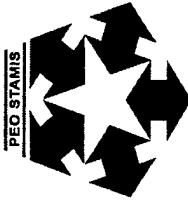
## **SYSTEM DEFINITION**

### **•JCALS PROVIDES:**

- Digital Environment and Applications to Automate the Management of Life-Cycle Support for Weapon Systems
- Distributed Data Environment to exchange Digital Logistical/Technical Information for all Services
- Support for Business Process Re-Engineering and Continuous Process Improvement Efforts

### **•JCALS APPLICATIONS/SERVICES:**

- Global Data Manager, Reference Library and Workflow Manager
- ADPE for Electronic Technical Manuals and Paperless Acquisition / Contracting

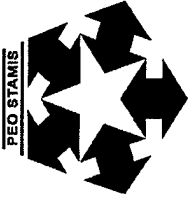


# JCALS

## STATUS

- **JOINT SERVICES TECHNICAL MANUAL**
  - **Limited Capability In FY 98**
  - **Full Capability In FY99; 435 Sites by Year 2004**
- **JCALS INFRASTRUCTURE INITIALLY DEPLOYED DURING 1996**
  - **Interfaces with up to 40 Legacy Systems**
  - **Currently installed with 14,000 Users at 47 Sites**
  - **Security Protection to C2 (Sensitive - Unclassified)**
  - **Utilizes DEC/HP/SUN/NT Servers**
- **COMMON OPERATING ENVIRONMENT (COE) COMPLIANT AS OF 2 MAR 98**





## JCALs

### REQUIREMENTS

#### • COMMERCIAL OFF-THE-SHELF (COTS) HARDWARE AND SOFTWARE

- Hardware: Client-Server Systems and Peripherals
- Software: Operating Systems, Communications, Office Automation, Security

#### • SUPPORT SERVICES

- System Integration and Installation
- Communications Installation & Upgrades
- Site Preparation

#### • OPERATIONAL ENVIRONMENTS

- Multi-Service - Worldwide Operations
- Sustaining Base

#### • JOINT TECHNICAL ARCHITECTURE (JTA), Y2K and OPEN ARCHITECTURE COMPLIANT SYSTEMS



## CONTRACT OPPORTUNITY

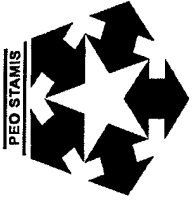
- **JCALs - SITE PREPARATION**
- **OBJECTIVE:** To Acquire Site Preparation Services for the Installation / Upgrade of LAN/WAN Backbone Systems, and Facilities Upgrade Services at JCALS Sites
- **PROPOSED CONTRACT TYPE:**  
Indefinite Delivery/Indefinite Quantity (IDIQ) / T&M
- **KEY MILESTONES:**

Draft RFP Release-4QFY99; Final RFP Release-1QFY00  
Contract Award - 2QFY00

- **ESTIMATED VALUE:** \$5 - 10 Million

- **POC NAMES/TELEPHONE NUMBERS:**

PM JCALS POC - Mr. John Kahrs, (732) 532-0400  
Acquisition POC - Ms. Donna Harris, (703) 325-6955

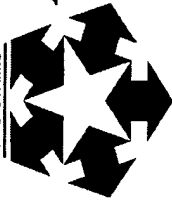


## CONTRACT OPPORTUNITY

- JCALs - COTS HARDWARE & SOFTWARE
- OBJECTIVE: To Procure Commercial Off-The-Shelf Hardware and Software for Deployment and Installation of JCALS Capability
- PROPOSED CONTRACT TYPE:  
Indefinite Delivery/Indefinite Quantity (IDIQ) / FFP
- KEY MILESTONES:

Draft RFP Release - 4QFY00; Final Release - 1QFY01  
Contract Award - 2QFY01

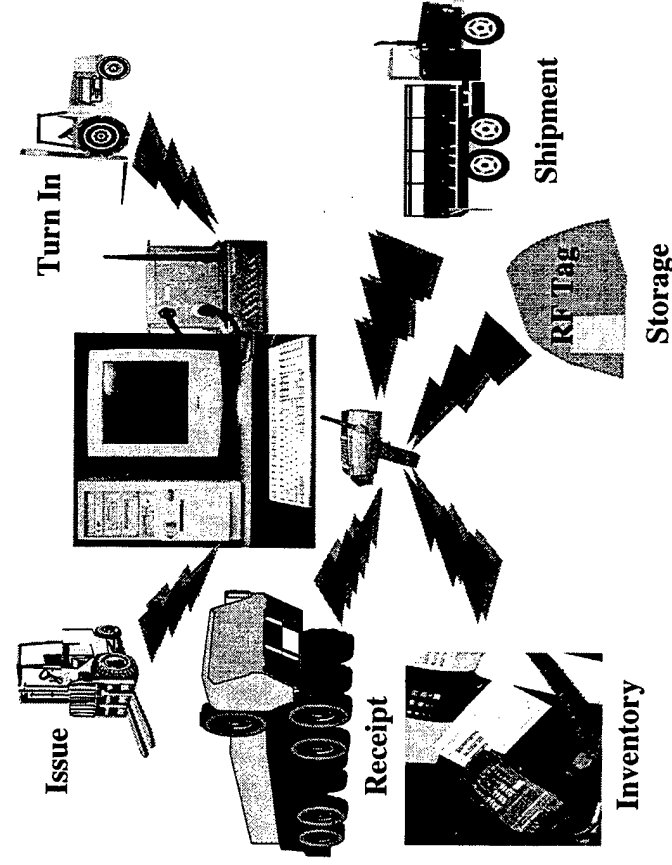
- ESTIMATED VALUE: \$20 - 50 Million
- POC NAMES/TELEPHONE NUMBERS:  
PM JCALS POC - Mr. John Kahrs, (732) 532-0400  
Acquisition POC - Ms. Donna Harris, (703) 325-6955



# AUTOMATIC IDENTIFICATION TECHNOLOGY (AIT)

## SYSTEM DEFINITION

- AIT PROVIDES:
- An IDIQ Contract Capability for Acquisition of Automated Devices to enable the Capture, Collection, Retrieval and Processing of Source Data for Shipping, Storage and Receipt of Logistical Equipment



SARSS

SAMS

SAAS

SPBS-R

MEDCOM

TC AIMS II

GCSS-A

MTS



## AIT

### STATUS

- **CURRENT AIT I CONTRACT AWARDED IN MAR 94**
  - **5-Year IDIQ (FFP) Contract (NTE \$250 Million):**
    - **Hardware**
    - **Software**
    - **Installation**
    - **Technical Engineering**
    - **Training**
- **RFD CONTRACT AWARDED IN AUG 97**
  - **3-Year IDIQ (FFP) Contract (NTE \$112 Million):**
    - **Hardware**
    - **Software**
    - **Documentation**
  - **2-Additional Years for Training, Technical Engineering Services and Maintenance**



AIT

## **REQUIREMENTS**

### **•COMMERCIAL OFF-THE-SHELF TECHNOLOGY**

•Hardware: Portable Data Collection Equipment

Bar Code Scanner/Readers/Printers

Voice Recognition Data Collection Terminals

RF Networks

•Software: Bar Code Applications

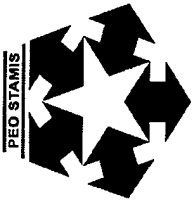
Data Collection Programs & Libraries

•Support Services: Site Surveys, Extensions, Integration

### **•WORLDWIDE OPERATIONAL ENVIRONMENTS**

•Tactical and Non-Tactical, Peacetime and Wartime

•Army STAMIS Community, DoD Organizations and  
Other U.S. Government Agencies



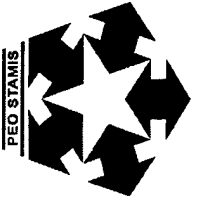
# CONTRACT OPPORTUNITY

- **AUTOMATIC IDENTIFICATION TECHNOLOGY**
- **OBJECTIVE:** To Provide an Automatic Identification Technology (AIT) Procurement Capability to acquire Commercial Off-The-Shelf (COTS) Hardware, Software and Support Services.
- **PROPOSED CONTRACT TYPE:**  
Indefinite Delivery/Indefinite Quantity (IDIQ)
- **KEY MILESTONES:**

**RFP Release: August 1998**

**Contract Award: December 1998**

- **ESTIMATED VALUE: \$150 - 250 Million**
- **POC NAMES/TELEPHONE NUMBERS:**
  - PM AIT - Ms. Susian Vickers, (703) 806-4110**
  - KO - Ms. Gloria McGee (703) 325-2927**



## **APBI-98 BACKUP SLIDES**

- PEO STAMIS PROGRAMS (OVERVIEW)**
- ADDITIONAL INFORMATION**





# Program Executive Office Standard Army Management Information Systems



**PO Y2K**  
Ms. Carolyn Sprague  
DSN: 656-0508, COMM: (703) 806-0508  
SFAE-PS, FAX: (703) 806-3212  
DDN: SPRAGUE@PEOSTAMIS.BELVOIR.ARMY.MIL

**Program Executive Office**  
COL Richard W. Johnson (PEO)  
DSN: 656-4235, COMM: (703) 806-4235  
SFAE-PS, FAX: DSN 656-4919  
DDN: JOHNSONR@PEOSTAMIS.BELVOIR.ARMY.MIL

**Deputy Program Executive Office**  
Mary D. Kelly  
DSN: 656-4200, COMM: (703) 806-4200  
SFAE-PS-D, FAX: DSN 656-4919  
DDN: KELLYM@PEOSTAMIS.BELVOIR.ARMY.MIL

**Reserve Component Liaison**  
LTC David Tucker  
DSN: 656-3652, COMM: (703) 806-3652  
SFAE-PS-RC, FAX: DSN 656-3212  
DDN: TUCKERD@PEOSTAMIS.BELVOIR.ARMY.MIL

**Pentagon Liaison**  
Ms. Elizabeth Borum  
IDSN: 225-8440, COMM: (703) 695-8440  
SFAE-PS-LNO FAX: DSN 225-8409  
DDN: BORUMIE@PENTAGON.IDVISA.ARMY.MIL

**Fort Belvoir Engineering Office**  
COL Robert A. Kirsch (Director)  
DSN: 656-3240, COMM: (703) 806-3240  
ASQB-OBE, FAX: DSN 656-3845  
DDN: KIRSCHR@PEOSTAMIS.BELVOIR.ARMY.MIL

**Plans & Programs Directorate**  
Ms. Patricia Phillips (Director)  
DSN: 656-3244, COMM: (703) 806-3244  
SFAE-PS-P, FAX: DSN 656-3344  
DDN: PHILLIPS@PEOSTAMIS.BELVOIR.ARMY.MIL

**Business Management Directorate**  
Ms. Rosalie Jordan (Director)  
DSN: 656-4238, COMM: (703) 806-4238  
SFAE-PS-R, FAX: DSN 656-4289  
DDN: JORDANR@PEOSTAMIS.BELVOIR.ARMY.MIL

**Horizontal Technology Integration Office**  
Mr. Robert Cohen (Director)  
DSN: 656-4195, COMM: (703) 806-4195  
SFAE-PS-H, FAX: DSN 656-4919  
DDN: COHENR@PEOSTAMIS.BELVOIR.ARMY.MIL

**PM ILOGS**  
Mr. Peter O. Johnson  
ATTN: SFAE-PS-RS  
800 Lee Avenue Bldg. 5100  
Ft. Lee, VA 23801-1718  
DSN: 687-7665, COMM: (804) 734-7665  
FAX: (804) 734-7107  
DDN: JOHNSONP@LEEJNSI.ARMY.MIL

**PO TACMIS**  
Mr. Robert Ragans  
ATTN: SFAE-PS-TP  
Ft. Belvoir, VA 22060-5526  
DSN: 656-3888, COMM: (703) 806-3888  
FAX: DSN 656-3903  
DDN: RAGANSR@PEOSTAMIS.BELVOIR.ARMY.MIL

**PM SBA**  
Ms. Roxanne C. Austin  
ATTN: SFAE-PS-SR  
Ft. Belvoir, VA 22060-5526  
DSN: 656-0500, COMM: (703) 806-0500  
FAX: (703) 806-0509  
DDN: AUSTINR@PEOSTAMIS.BELVOIR.ARMY.MIL

**PM JCALS** ★  
Mr. Robert Doto  
ATTN: SFAE-PS-CAL  
Ft. Monmouth, NJ 07703-5000  
DSN: 992-0400, COMM: (732) 532-0400  
FAX: DSN 992-0403  
DDN: DOTO@DOMANMONMOUTH.ARMY.MIL

**PM ARISS**  
COL Jerry Henderson  
ATTN: SFAE-PS-JR  
1307 3rd Avenue  
Ft. Knox, KY 40121-5000  
DSN: 536-1191, COMM: (502) 626-1100  
FAX: 626-0927  
DDN: HENDERSON@FMDUSAREC.ARMY.MIL

**PM DMS-A** ★  
COL Robert Ralford  
ATTN: SFAE-PS-DMS  
BLDG 283, Ft. Monmouth, NJ 07703-5605  
DSN: 992-7913, COMM: (732) 532-7913  
FAX: DSN 992-3333  
DDN: RALFORDR@FMVAECONMOUTH.ARMY.MIL

**Product Mgrs/Offices**

DAMMS-R	6047
SAAS	7686
SAMS	7688
LTC Joseph Brito	7688
GCSS-A	7688
MTS	6047
Herb Andreen	7683
SARSS/ATAV	7689
LTC Ricky Daniels	
ULLS/SPBS-R	
Vacant	

**Product Mgrs/Offices**

AIT	4110
Susan Vickers (PM)	
CTASC-II	
STACOMP	3956
Mr. Robert Bradley (PO)	
PERMS	4259
Mr. Ernest Glauberson (PM)	
CAISI	3414
NIAJ Hieu Tran (PO)	

**Project Office**

HSMS	0525
Mr. Carl Glass (PO)	
DCPDS	
Mr. William Bushman (PO)	
(703) 428-8668 x 243	

**PM SIDPERS-3**

LTC Jenna Noble	
ATTN: SFAE-PS-YS	
Ft. Belvoir, VA 22060-5526	
DSN: 656-4232, COMM: (703) 806-4232	
FAX: (703) 806-4188	
DDN: NOBLE@PEOSTAMIS.BELVOIR.ARMY.MIL	

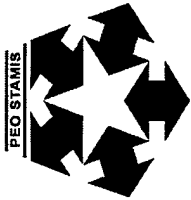
**PO TC-AIMS II** ★  
Mr. Stan Polonsky  
ATTN: SFAE-PS-TC  
Ft. Belvoir, VA 22060-5526  
DSN: 656-0525, COMM: (703) 806-0525  
FAX: (703) 806-0567  
DDN: POLONSKS@PEOSTAMIS.BELVOIR.ARMY.MIL

**PM TADLP**  
Mr. Gary Winkler  
ATTN: SFAE-PS-DL  
Ft. Monro, VA 23651  
DSN: 680-5553, COMM: (757) 727-5553  
FAX: DSN 680-5509  
DDN: WINKLER@ENHILCONROE.ARMY.MIL

[WWW.PEOSTAMIS.BELVOIR.ARMY.MIL](http://WWW.PEOSTAMIS.BELVOIR.ARMY.MIL)

☐ = ACAT 1A Systems  
★ = Joint Programs

**Mailing Address**  
PEO STAMIS  
ATTN: SFAE-PS  
9350 Hall Road, Suite 142  
Fort Belvoir, VA 22060-5526



# PROJECT OVERVIEW

## Logistics Systems

### SAAS\* *Standard Army Ammunition System*

Implements the Army's peace time and war time *ammunition management* system for stock control accounting and supply management Division to Theater

ACAT    MDA  
IIA       DA

### SARSS\* *Standard Army Retail Supply System*

SARSS-Objective supports the Army's *retail supply* operations and management.  
SARSS-1: SSA/s. SARSS-2AD: Division, Sep. Bde., ACR Materiel Mgmt Centers (SARSS-2AC/2AB: Corps/Theater MMCs; SARSS-Gateway: Formerly SARSS-OSC)

IA       PEO  
         STAMIS

### ULLS\* *Unit Level Supply System*

Provides a standardized system for Army unit *Prescribed Load List & maintenance* management. ULLS consists of Air, Ground, & S4 components.

IA       PEO  
         STAMIS

### ILAP\* *Integrated Logistics Analysis Program*

Integrates automated *logistics management and financial data* for Commanders, Logisticians & Resource Managers at all echelons during peacetime, and wartime.

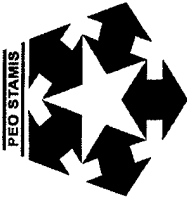
N/A      PEO  
         STAMIS

### SAMS\* *Standard Army Maintenance Systems*

Automates weapon system and sub-component *readiness status, maintenance and related repair parts information and management* functions.

IA       PEO  
         STAMIS

\* Legacy Systems will integrate with GCSS-Army in FY98/99



# PROJECT OVERVIEW

ACAT MDA  
IA DA

## GCSS-Army Global Combat Support System-Army

Replaces Combat service support “stovepipes” with a modern integrated system and is the Army portion of the Global Combat Support System (GCSS). Supports the CSS functions of manning, arming, fixing, fueling, moving, and sustaining soldiers and their systems.

## Personnel Management

### SIDPERS-3 Standard Installation/Division Personnel System

IA OSD

Supports field commanders in peace time and war time with accurate military personnel information to make decisions and effectively manage personnel assets.

### ARISS Army Recruiting Information Support Systems (formerly JRISS)

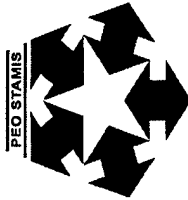
IA OSD

Provides DoD standard software tools and associated automation infrastructure to support the overall recruiting mission. It will aid Service recruiters with daily operations to meet new accession goals in an era of dwindling resources.

### PERMS Personnel Electronic Record Management System

IA DA

Replaces current paper/microfiche personnel files with digital images, eliminating duplicate records and providing optical digital imagery technology for Army records rqmts.



# PROJECT OVERVIEW

## Transportation Systems

ACAT MDA  
IA OSD

### TC-AIMS-II *Transportation Coordinators-Automated Information for Movement System II*

*A joint service migration system which provides an integrated set of transportation applications to facilitate movements management of personnel, equipment and supplies from home station to the conflict and back.*

### DAMMS-R *Department Army Movements Management System-Redesign*

IA PEO  
STAMIS

*Supports automated movements management, transportation operations, and transportation resources. Transitions to TC-AIMS II in FY98*

### MTS *Movement Tracking System (MTS)*

WRAP DA

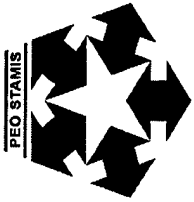
*Provides the location of vehicles to track and communicate with vehicle operators, and redirects mission on a worldwide, near real-time basis.*

## Enabling Technologies

### AIT *Automatic Identification Technology*

N/A N/A

*Provides Automatic Identification Technology (AIT) and Radio Frequency Identification (RFID) technology to facilitate asset visibility/accountability*



# PROJECT OVERVIEW

## Continuous Acquisition & Logistics Support

ACAT MDA

### JCALs Joint Continuous Acquisition and Logistics Support

IA OSD

A Joint Services initiative to generate, process and exchange logistical/technical and acquisition information in *digital* form to manage *weapons system life cycle* support as they transition to a paperless environment.

## Global Messaging

### DMS-A Defense Messaging System - Army

IA OSD

Facilitates and coordinates an *integrated message system* to replace today's Telecommunication Centers and AUTODIN Switching Centers with C2 messaging capability for all DOD locations - sustaining base to battlefield.

## Training Technology

### TADLP Total Army Distance Learning Program

IA DA

Delivers standardized *individual, selected collective, and self-development training* to soldiers and units at the right place and right time through the *application of multiple electronic technologies*.

## Power Projection

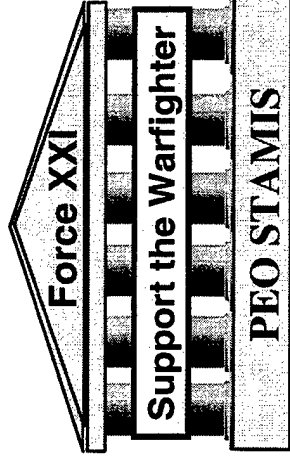
### SBIS Sustaining Base Information Services

IA DA

*Modernizes sustaining base infrastructure and fields up to 15 standard installation support applications for power projection and power project support sites. Reduces operating costs and supports mobilization and transition processing.*



## SUMMARY



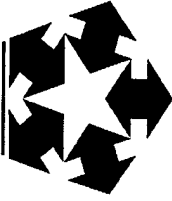
### • **STAMIS SYSTEMS ARE CRITICAL TO *READINESS, MOBILIZATION, DEPLOYMENT AND SUSTAINMENT***

- Integrated Systems
- Business Process Re-engineering
- Software Management Best Practices
- Sound Engineering Principles
- DII/COE Standards
- Enabling Commercial Technologies & Processes

***Faster***

***Better***

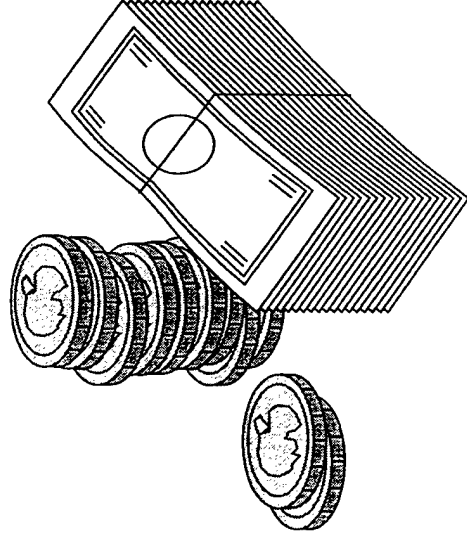
***Cheaper***

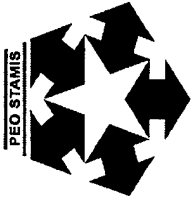


# WHAT IS UNDER PEO STAMIS MANAGEMENT

- **KEY COMBAT SERVICE SUPPORT and BUSINESS SYSTEMS**

- Logistics systems
- Personnel Mgmt Programs
- Sustaining Base/Power Projection
- Transportation Mgmt
- Distance Learning
- Computer-Aided Acquisition & Logistics Support
- Automatic Identification Technology

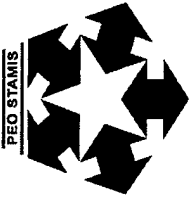




## ARCHITECTURE COMPLEXITY

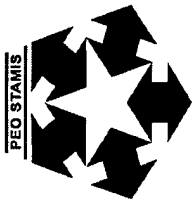
- **SYSTEMS MUST BE DESIGNED TO OPERATE EFFICIENTLY OVER A VARIETY OF COMMUNICATIONS MEDIA**
  - **40,000 logistics computers representing 7 systems, each with 60-100 interfaces**
  - **4,000 personnel system computers**
  - **12,500 mobile recruiting users**
  - **Source data automation via enabling technologies (Automatic Identification Technology, RFID, etc.)**
- **LIMITED TACTICAL COMMUNICATIONS FOR COMBAT SERVICE SUPPORT (CSS), BELOW BRIGADE LEVELS**





# ARCHITECTURE CHALLENGES

- **LEGACY HETEROGENEOUS OPERATING SYSTEM and HARDWARE**
- **YEAR 2000 INITIATIVES**
- **MAINTAIN DATA INTEGRATION & LEGACY INTERFACES WHILE MODERNIZING SYSTEMS**
- **SYSTEMS AND NETWORK ADMINISTRATION BY FUNCTIONAL USERS:**
  - **NO SIGNAL ASSETS BELOW BRIGADE**
  - **COMMUNICATION AND DATA EXCHANGE BETWEEN UNCLASSIFIED and SECRET (MLS)**



## OUR APPROACH

### •UTILIZE *TECHNOLOGY INSERTION*

- Keep new ideas flowing
- Utilize existing contracts (IDIQ / extended warranties)

### •APPLY BUSINESS PROCESS *REENGINEERING*

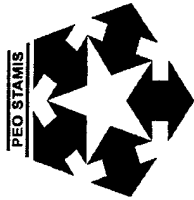
### •INVEST IN AREAS OF HIGH PAYOFF

- Rapid application methodology
- Reuse, commercial applications

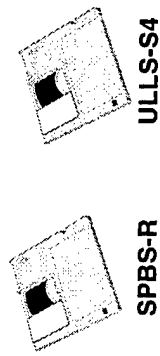
### •Technologies

- Commercial-Off-The-Shelf (COTS) hardware/software
- SW Mgmt Best Practices & Sound Engineering Principle
- Centralized system fielding and area-wide extensions
- Emerging training concepts

### •INCREASE OUTSOURCING: *RELY ON INDUSTRY*



# AN EXAMPLE THE GCSS-ARMY PROGRAM



SPBS-R



SAMS-1



SARSS-1



ULLS-G



SAMS-I/  
TDA



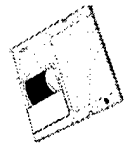
SARSS-2AC/B



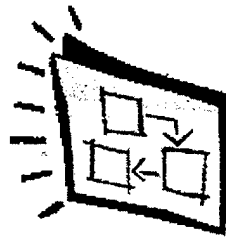
SAAS



ILAP

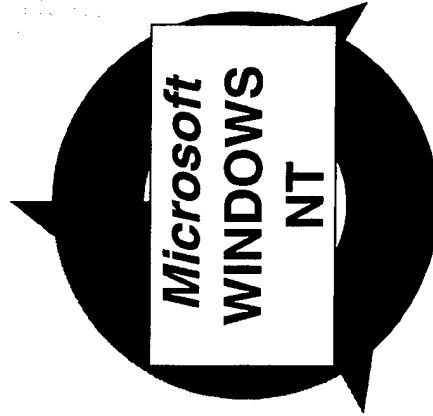


SARSS-GATEWAY

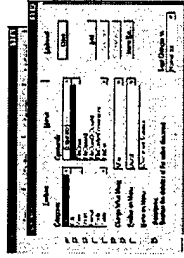


Designer/2000

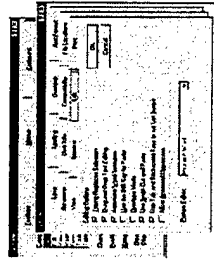
## BUSINESS PROCESS RE-ENGINEERING



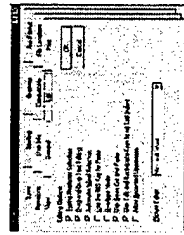
## PRODUCT LINE MODULES



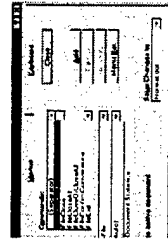
SUPPLY



MAINTENANCE



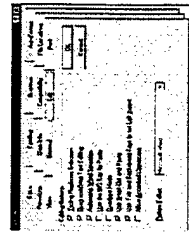
AMMO



IMMC



PROPERTY

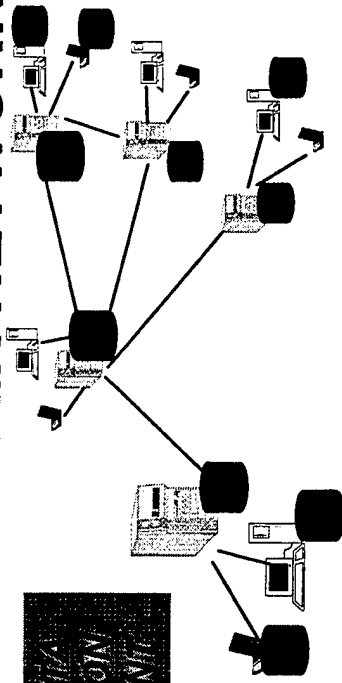


MGMT

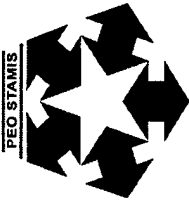
COMPUTER COMPONENTS

APPLICATION SOFTWARE

## GCSS-ARMY SERVER NETWORK



APPLICATION SOFTWARE  
COMPUTER COMPONENTS



# PEO STAMIS

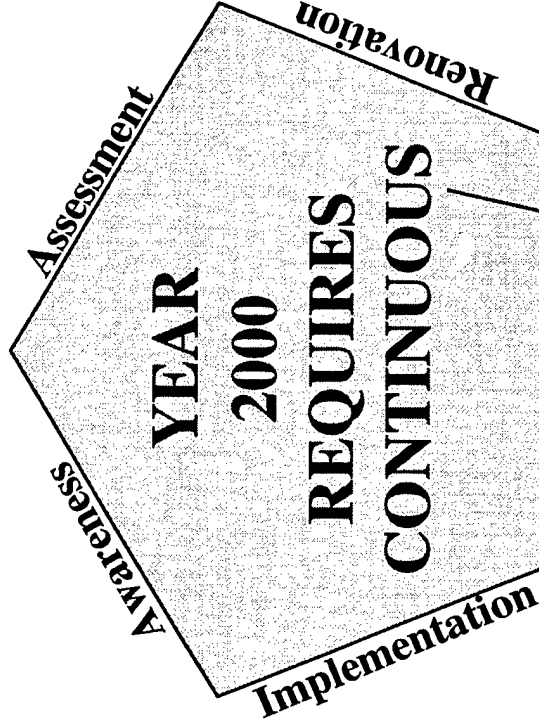
## Y2K Management Challenge

**Y2K MANAGEMENT OF 47 SYSTEMS/MODULES + INFRASTRUCTURE  
(0 COMPLIANT TODAY - 72% MISSION CRITICAL)**

**ASSESS / TEST  
OVER 35 MILLION  
SLOC**

**60,000 FIELDIED  
HARDWARE/  
DEVICES  
TO BE TESTED**

**COORDINATION  
WITH 8 FUNCTIONAL  
PROONENTS**



**315 INTERFACES  
REQUIRING  
INTERFACE  
AGREEMENTS &  
TESTING**

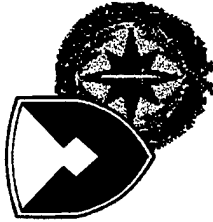
**570 VERSIONS  
COTS  
PRODUCTS**

**N-TIER CLIENT/SERVER  
ARCHITECTURES**

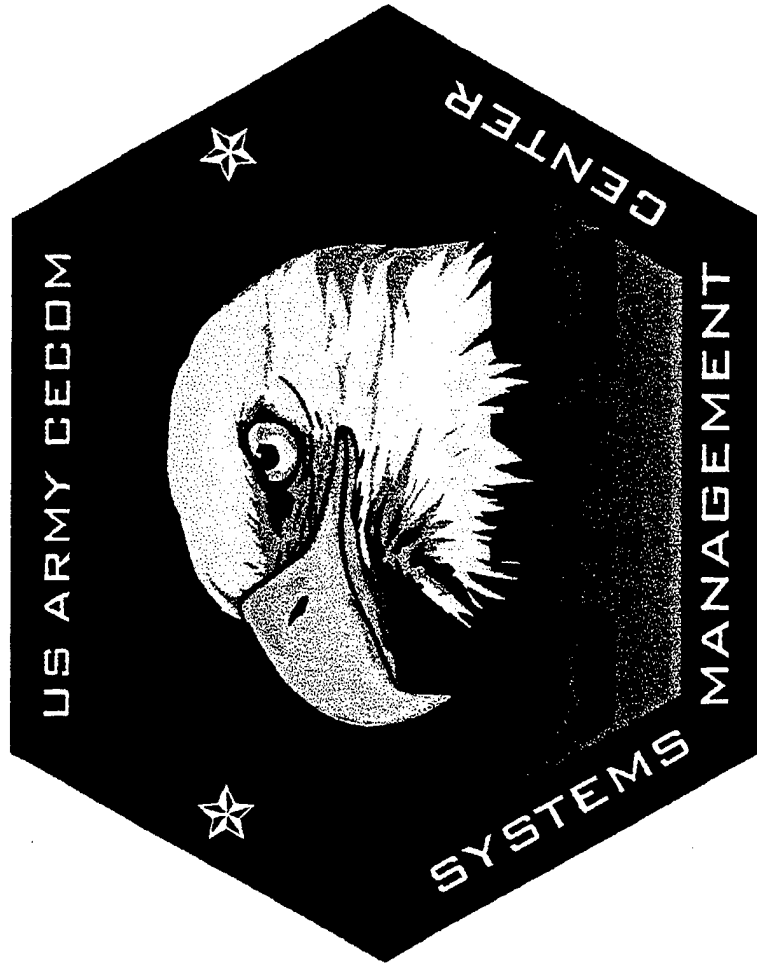


# NOTES

# SESSION IV

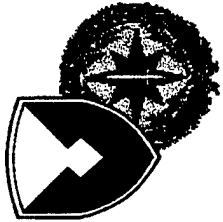


# U.S. Army CECOM Systems Management Center

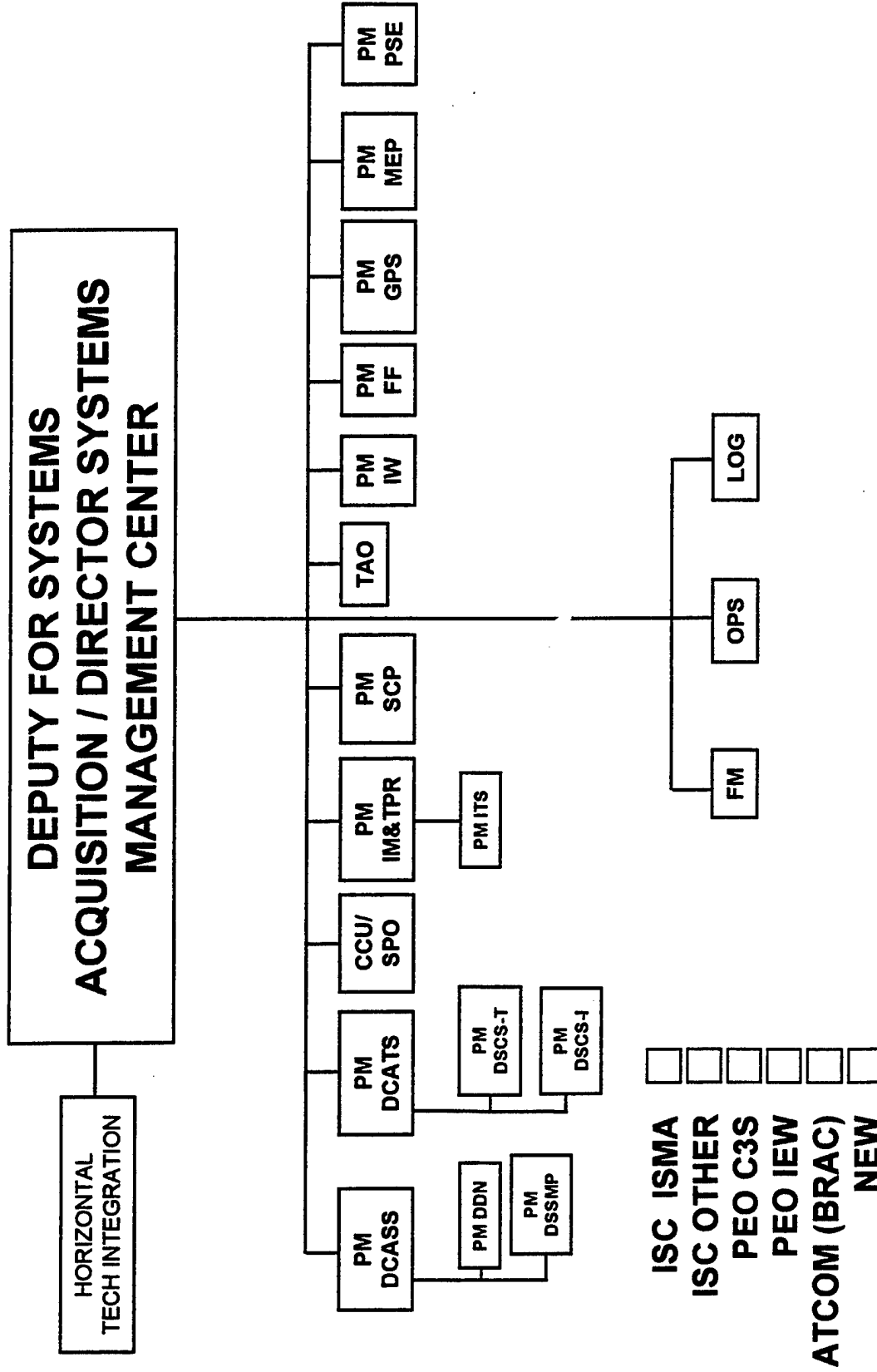


**Ms. Maureen MacFarland**  
**Deputy Director, Systems Management Center**

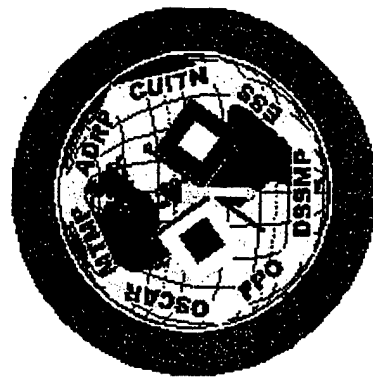
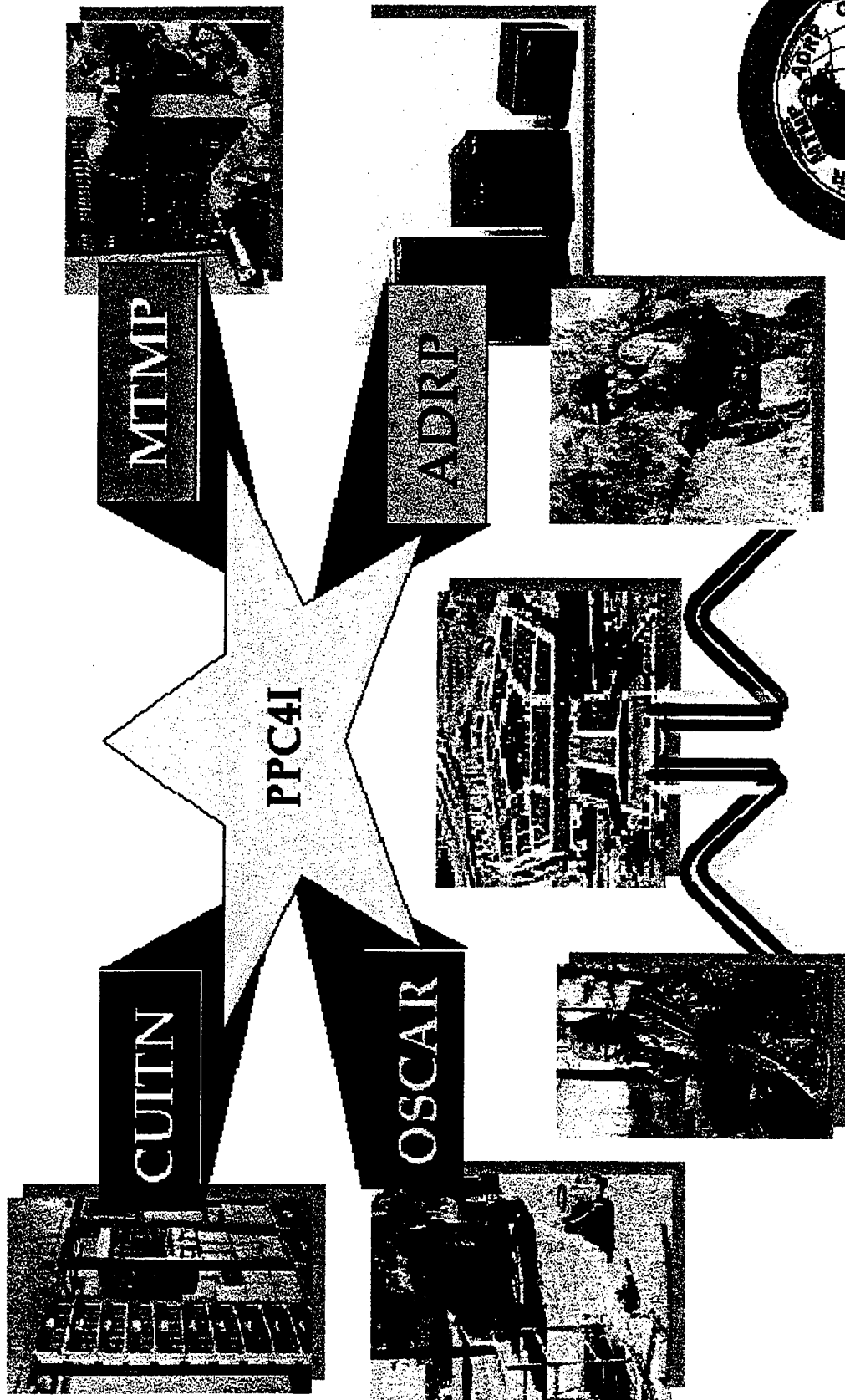
UNCLASSIFIED



# U.S. Army CECOM Systems Management Center





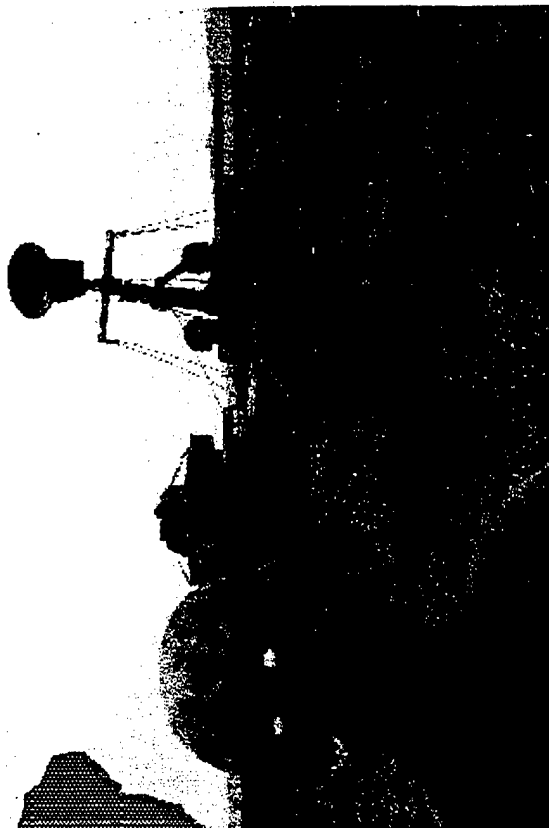
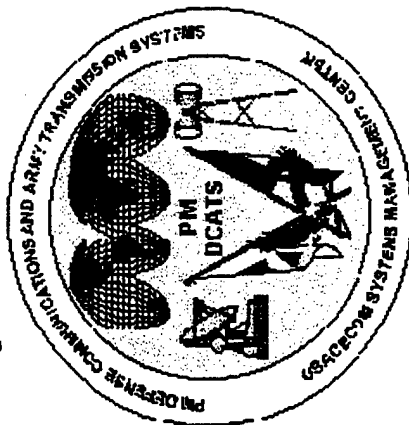
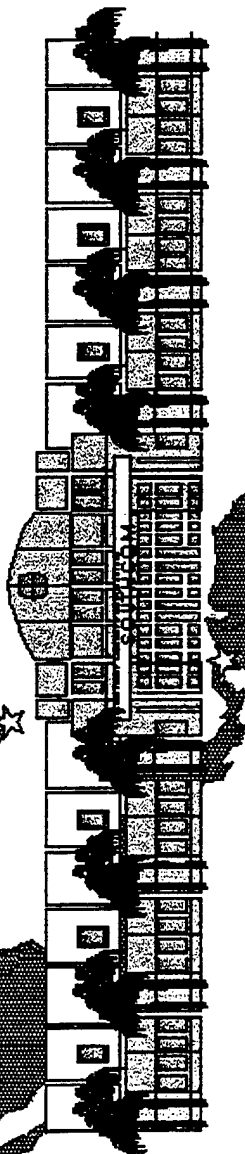


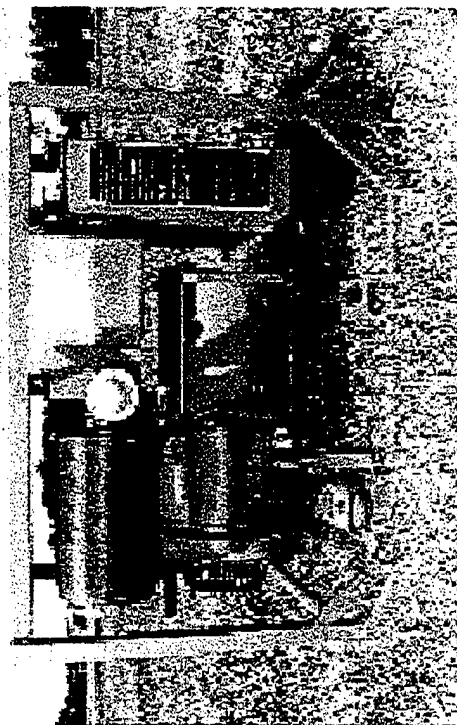
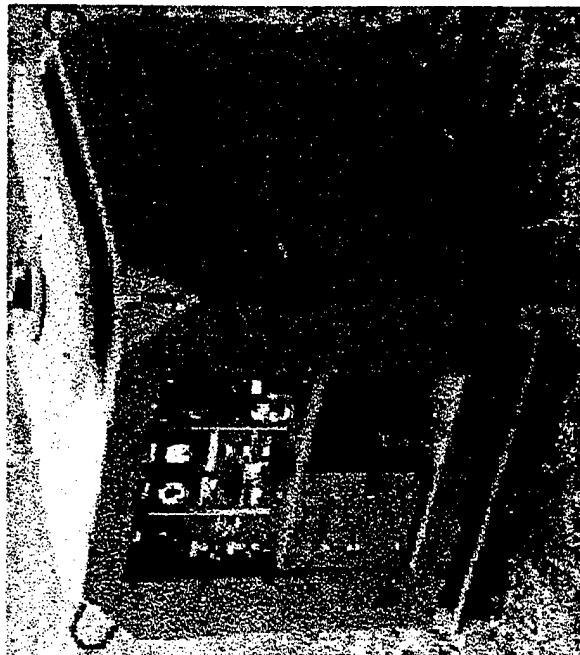
# PM DCASS

Project Manager, Defense Communications & Army Switched Systems

# PM DCATS

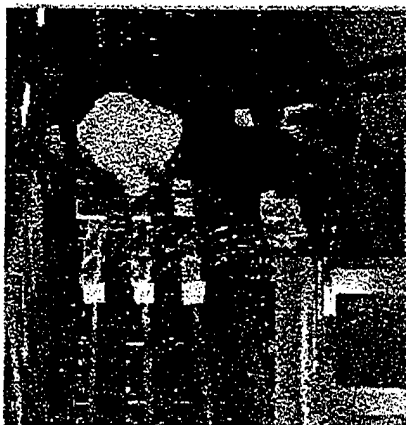
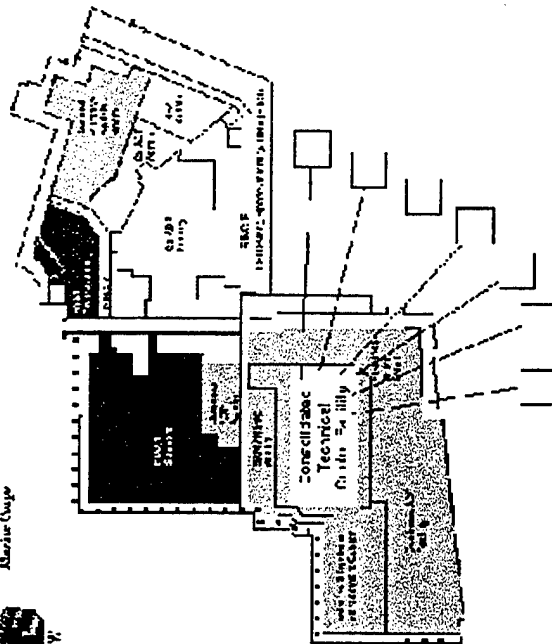
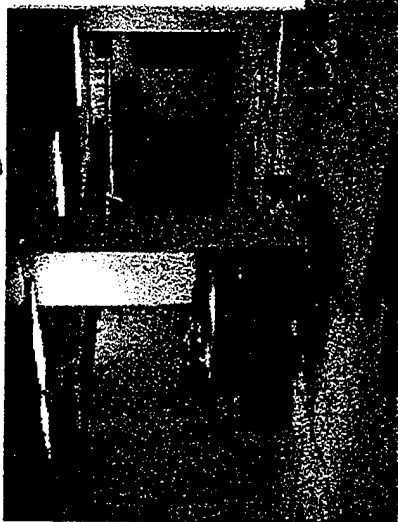
Project Manager, Defense Communications  
and Transmission Systems

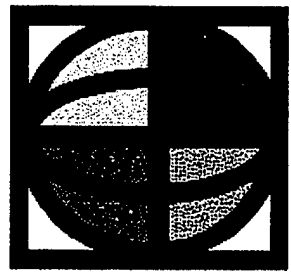




**PM MEP**  
*Project Manager  
Mobile Electric Power*

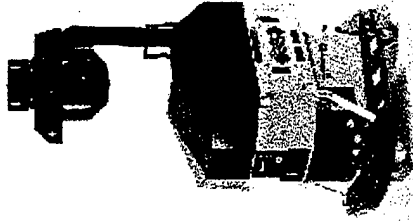
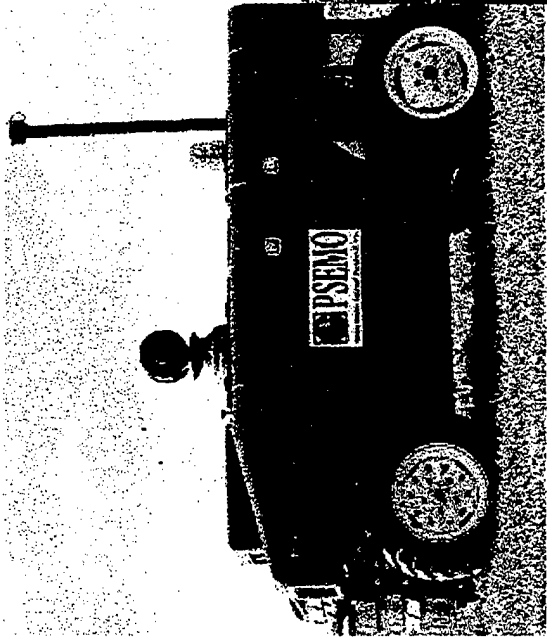
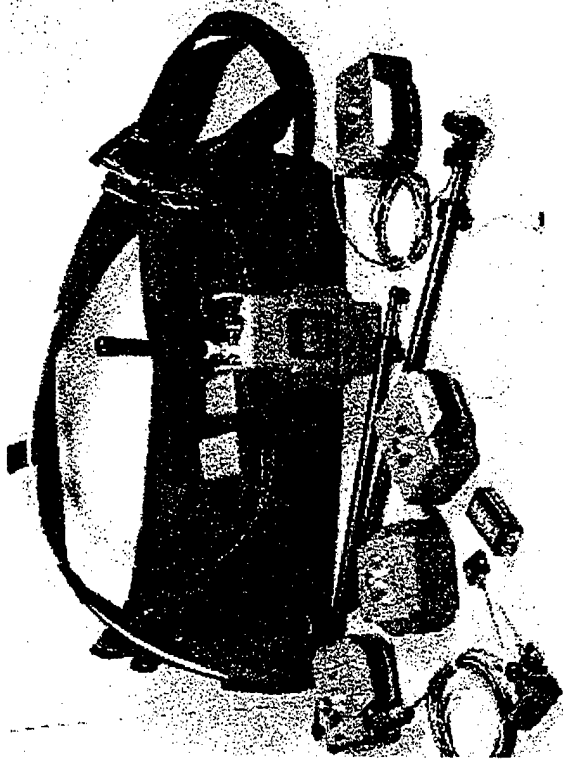
# Pentagon Renovation Information Management and Telecommunications Project

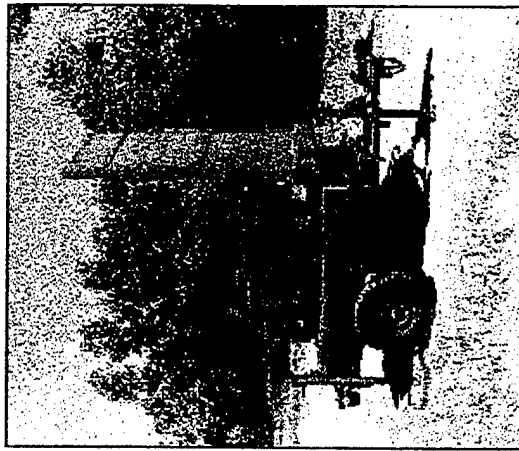




# PM-PSE

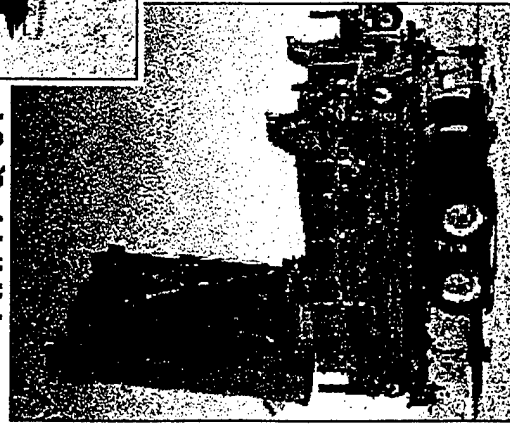
Product Manager, Physical Security Equipment



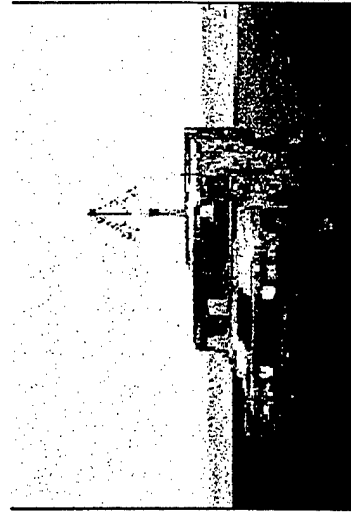
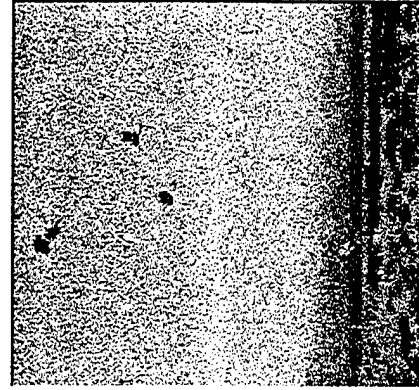


AN/TPQ-37

AN/TPQ-36



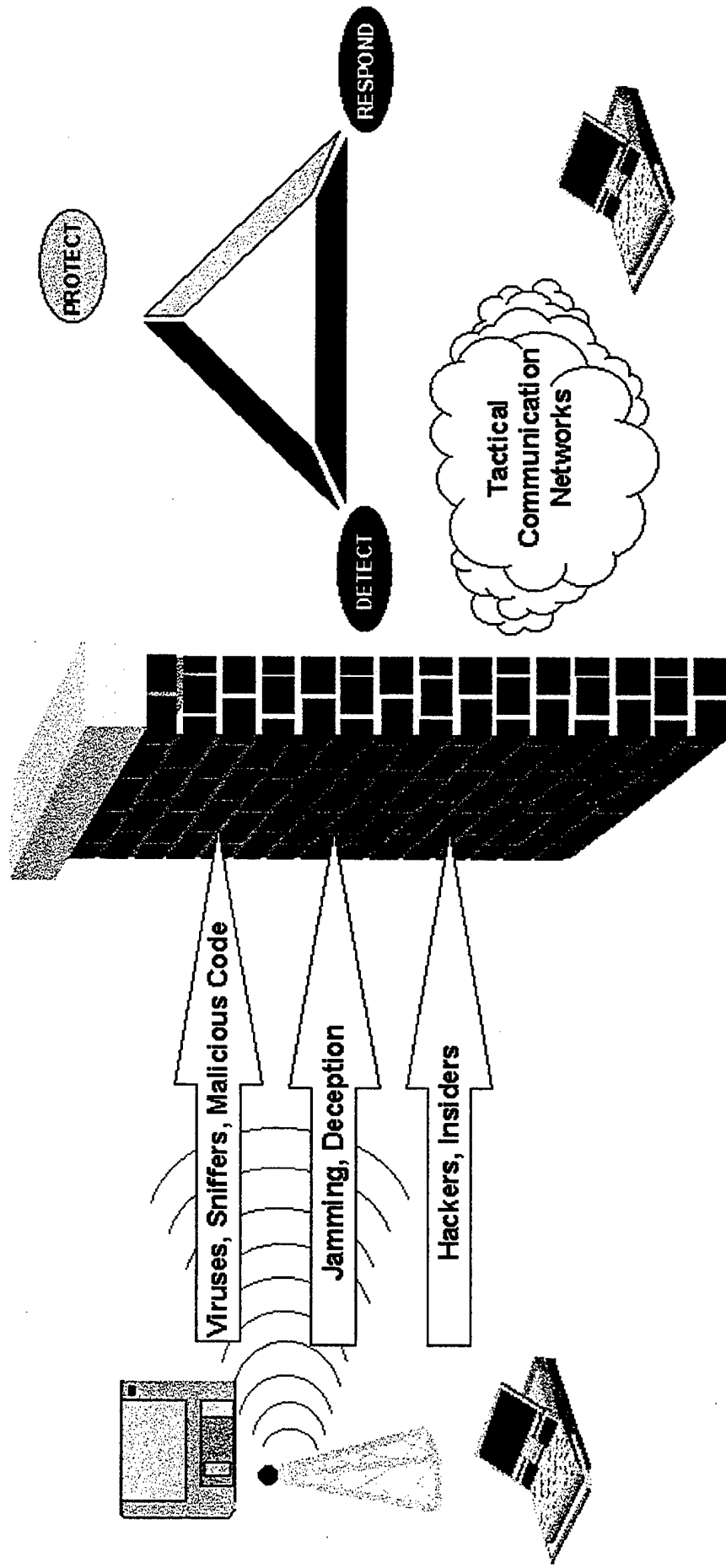
# PM Firefinder

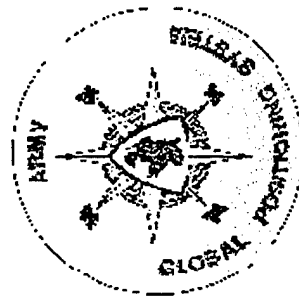
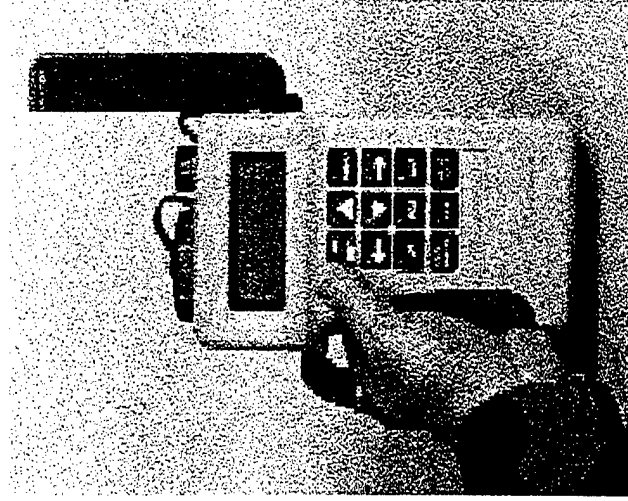
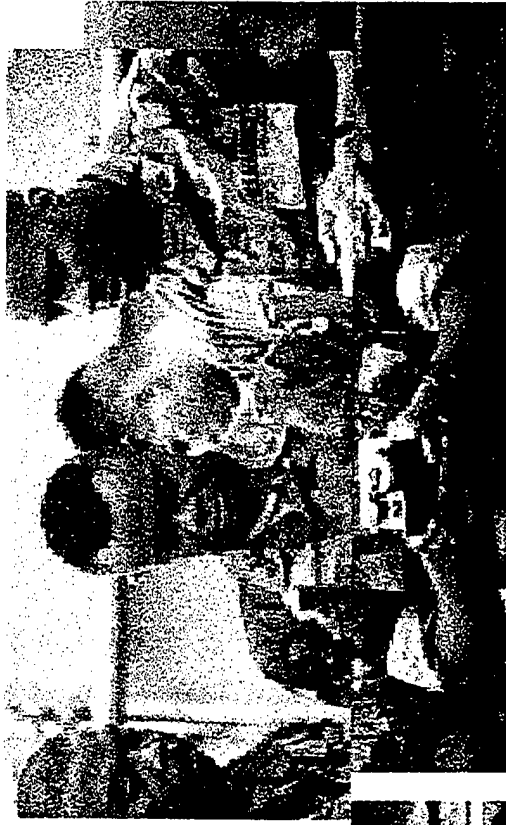
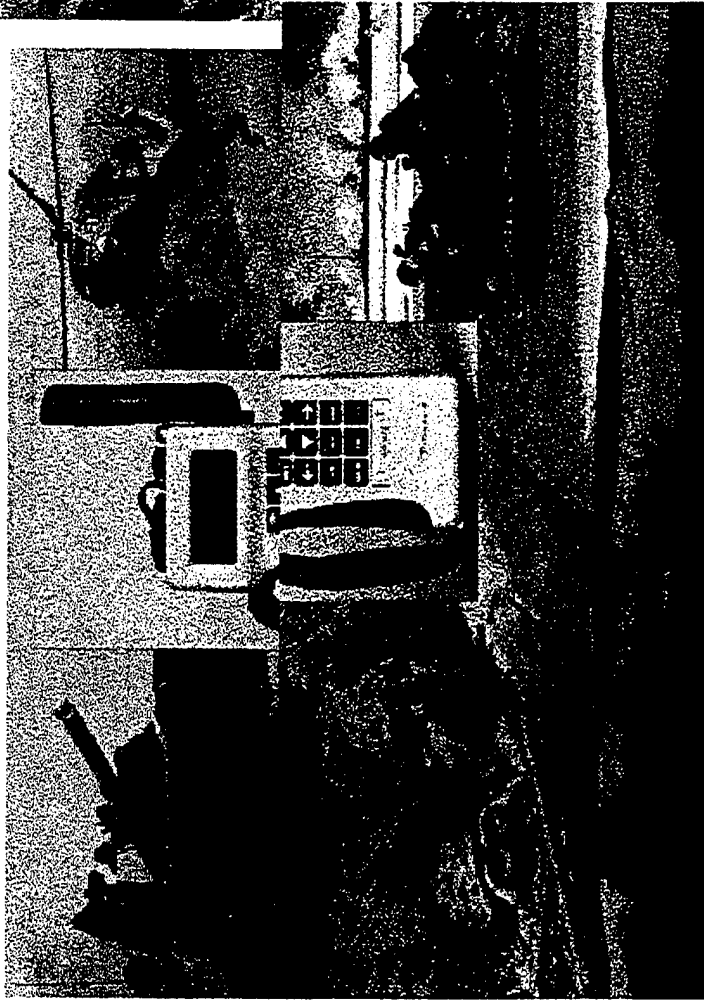




# PM IW

Product Manager  
Information Warfare

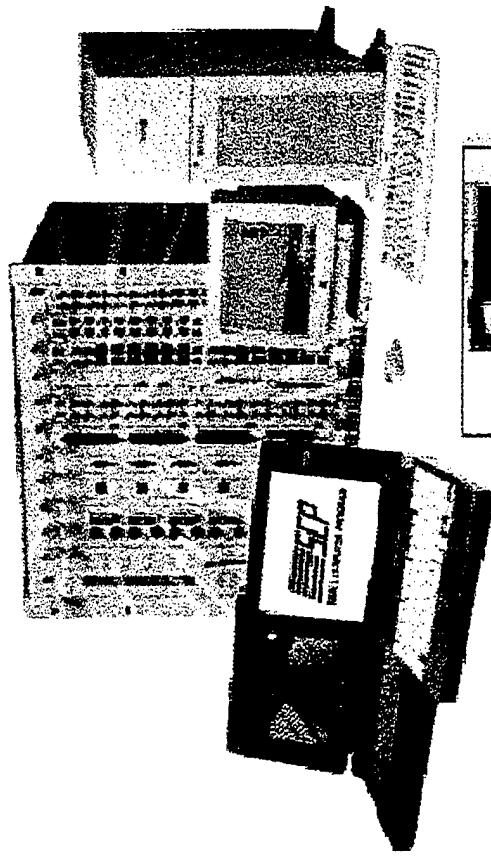
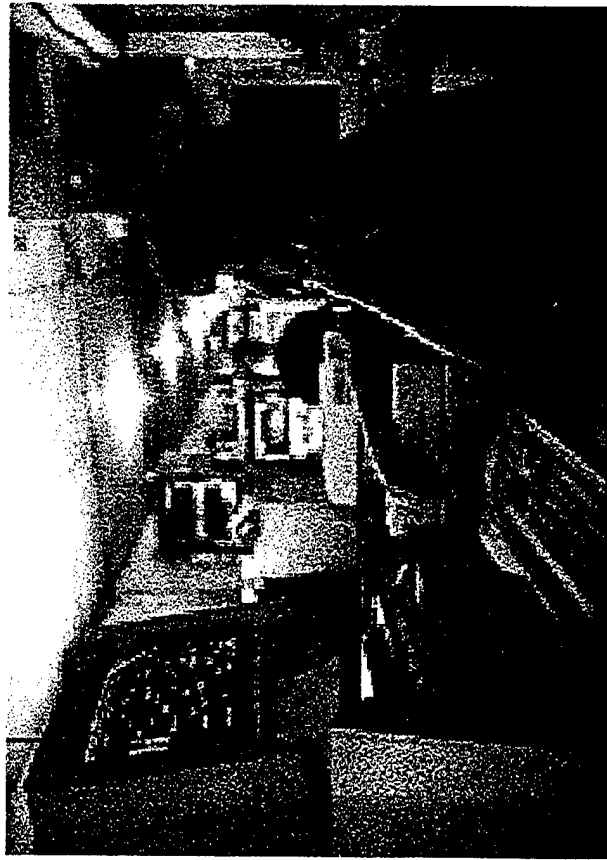




# PM GPS

**Product Manager, Global Positioning Systems**





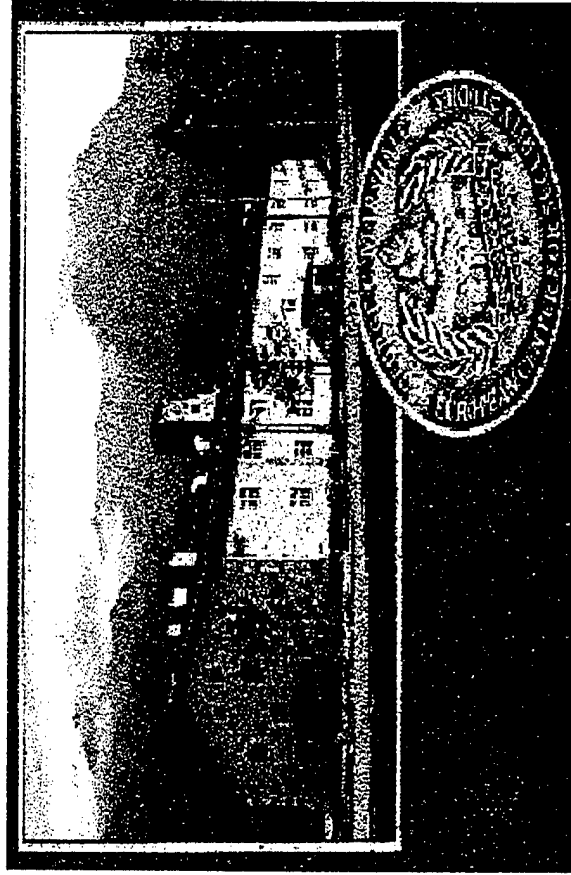
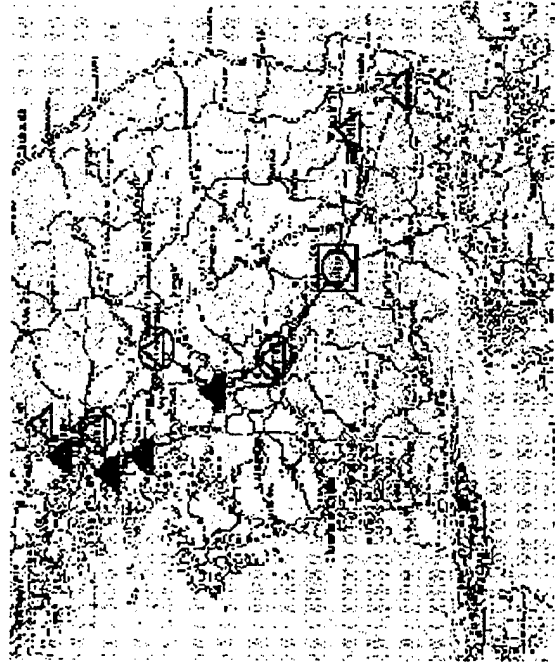
# **PM SCP**

***Product Manager  
Small Computer Program***



**EUCOM COMMAND CENTERS PROGRAM  
(ECCP)**

**KOREAN NETWORK  
MANAGEMENT SYSTEM (KNMS)**



**GEORGE C. MARSHALL CENTER  
(GCMC)**

**CCU/SPO**

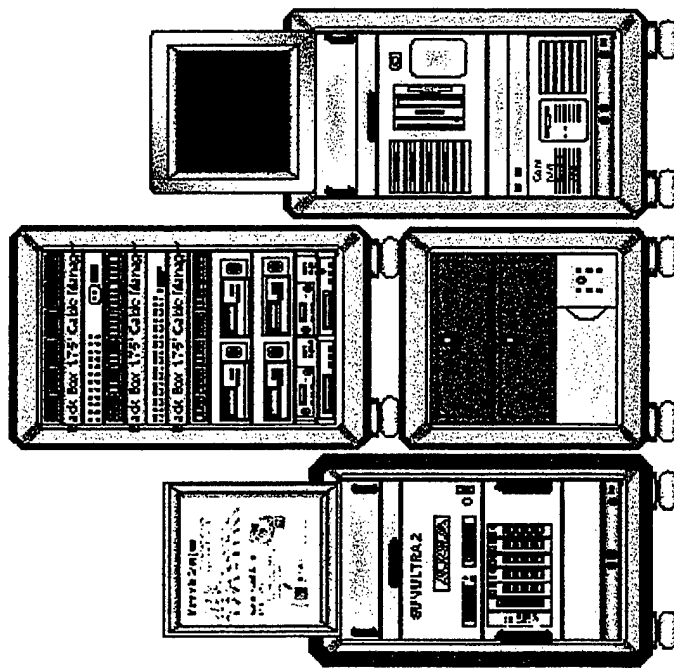
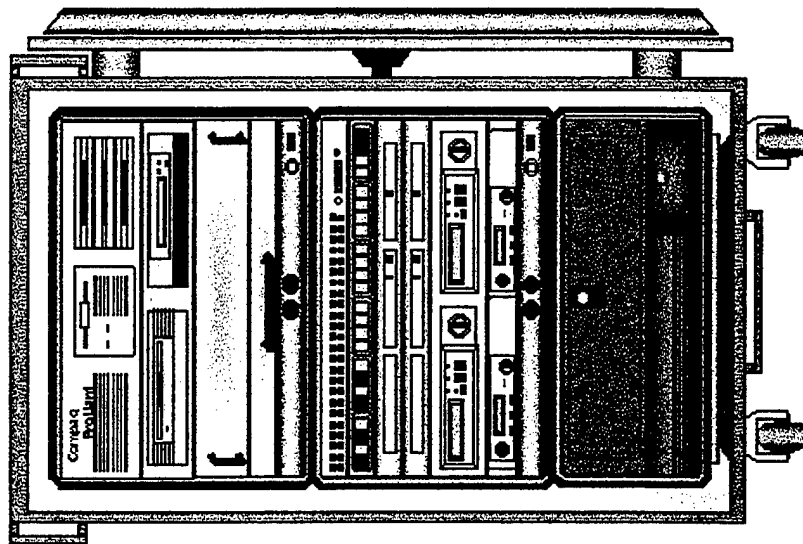
Command Center Upgrades/  
Special Projects Office



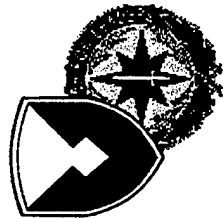


# Technology Applications Office

Hamilton Dual Door Equipment Safe

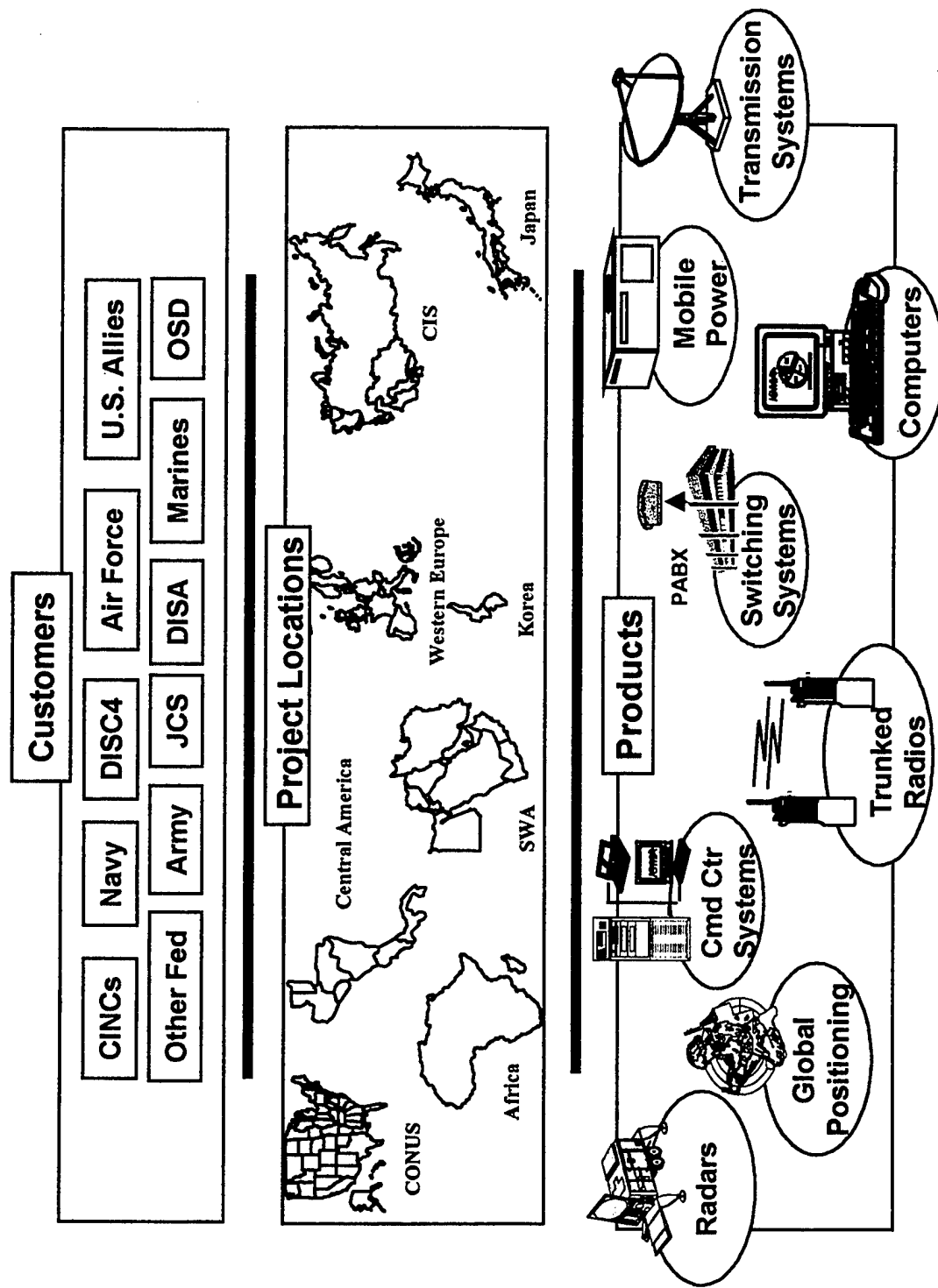


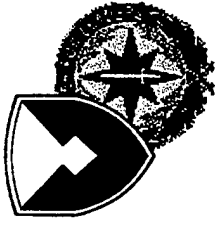
Transportable Wide Area Network  
Hub and DCIS Server



# U.S. Army CECOM Systems Management Center

## ACQUISITION ROLE





U.S. Army CECOM Systems Management Center



## PRESENTERS

LTC Mary Fuller  
PM Small Computer Program

Mr. Eric Swenson  
Logistics Directorate

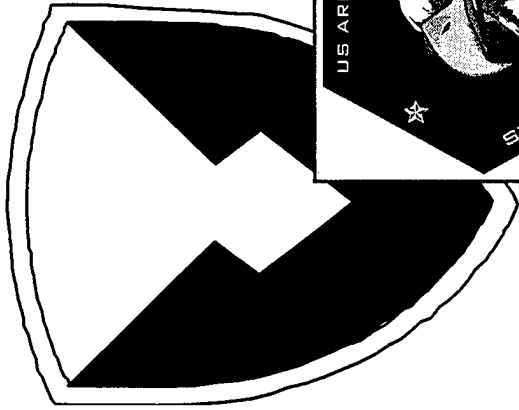
Mr. Jay Hicks  
PM Defense Communications and Army Transmission Systems

Mr. Thomas C. Endler  
PM Physical Security Equipment

MAJ Mike Biega  
PM Global Positioning Systems



# NOTES

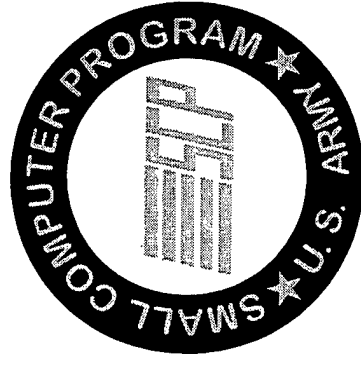


US ARMY CECOM  
SYSTEMS MANAGEMENT CENTER



# ADVANCE PLANNING BRIEFING FOR INDUSTRY

# U.S. ARMY SMALL COMPUTER PROGRAM LTC MARY FULLER



UNCLASSIFIED

28 April 98

POINT PAPER

SUBJECT: Army Infrastructure Architecture Solutions-1 (IAS-1)

OBJECTIVE: IAS-1 is the acquisition of Commercial-Off-The Shelf (COTS) multi-user-server and network server computer equipment including software, networking components and technical support services to satisfy Army, Navy, Air Force, DoD agencies and Civilian federal agencies office automation networking requirements.

FACTS:

- Army Technical Architecture (ATA) certified products that will support worldwide Army/DoD/Civilian agencies' network server/software requirements. This acquisition will follow the Small Multiuser Computer-II (SMC-II) contract, which is scheduled to expire at the end of FY 98.
- All monitors and printers will be Energy Star compliant.
- All equipment provided will be Year 2000 compliant.
- Complies with all DoD technical directives/standards, including the Technical Architecture Framework for Information Management (TAFIM).
- Milestones listed below reflect the planned schedule for IAS-1. All schedules are planned to provide procurement coverage for Army, DoD and Civilian agency users worldwide.

\*\*RFP Release

4th Qtr FY98

\*\*Contract Award

1st Qtr FY99

- This will be a Best Value evaluation with a minimum of 2 awards. The procurement is planned to run for three years for ordering. Electronic Order Processing is projected. The procurement will be a FFP ID/IQ award.

BRIEFER: LTC Mary Fuller, Product Manager, Army Small Computer Program, AMSEL-IS-SCP, (732) 427-6791.

Product Manager:  
LTC Mary Fuller  
Small Computer Program  
(732) 427-6791



28 April 98

POINT PAPER

SUBJECT: Army Video TeleConferencing-1 (VTC-1)

OBJECTIVE: VTC-1 is the acquisition of Commercial-Off-The-Shelf (COTS) video teleconferencing products and services both CONUS and OCONUS to satisfy Army, Navy, Air Force, DoD agencies and Civilian federal agencies' rapidly-evolving remote-site meeting missions.

FACTS:

- Army Technical Architecture (ATA) certified products that will support worldwide Army/DoD/Civilian agencies' office video teleconferencing requirements. This acquisition will follow the Army's two current Video Teleconferencing contracts which are scheduled to expire in the 3rd Qtr FY98.
- All monitors, roll-abouts and multi-camera systems will be upgradable.
- All equipment provided will be Year 2000 compliant.
- Complies with all DoD technical directives/standards, including the Technical Architecture Framework for Information Management (TAFIM).
- Milestones listed below reflect the planned schedule for VTC-1. All schedules are planned to provide procurement coverage for Army, DoD and Civilian agency users worldwide.

\*\*RFP Release

3rd Qtr FY98

\*\*Contract Award

4th Qtr FY98

- This will be a Best Value evaluation with a minimum of 2 awards. The procurement is planned to run from 2 to 3 years for ordering. Electronic Order Processing is projected. The procurement will be via a BPA.

BRIEFER: LTC Mary Fuller, Product Manager, Army Small Computer Program, AMSEL-IS-SCP, (732) 427-6791.

Product Manager:  
LTC Mary Fuller  
Small Computer Program  
(732) 427-6791

28 April 98

POINT PAPER

SUBJECT: Army Portable Computer-3 (Port-3)

OBJECTIVE: Port-3 is the acquisition of Commercial-Off-The-Shelf (COTS) general purpose Notebook and Handheld computers and peripherals to satisfy Army, Navy, Air Force, DoD agencies and Civilian federal agencies' mobile computing missions.

FACTS:

- Army Technical Architecture (ATA) certified products that will support worldwide Army/DoD/Civilian agencies' portable computer requirements. This acquisition will follow the Army Portable Computer-2 (Port-2) contract which is scheduled to expire in the 2nd Qtr FY99.
- All monitors and printers will be Energy Star compliant.
- All equipment provided will be Year 2000 compliant.
- Complies with all DoD technical directives/standards, including the Technical Architecture Framework for Information Management (TAFIM).
- Milestones listed below reflect the planned schedule for Port-3. All schedules are planned to provide procurement coverage for Army, DoD and Civilian agency users worldwide.

\*\*RFP Release

1st Qtr FY99

\*\*Contract Award

3rd Qtr FY99

- This will be a Best Value evaluation with a minimum of 2 awards. The procurement is planned to run for 2 years for ordering. Electronic Order Processing is projected. The procurement will be a FFP ID/IQ award.

BRIEFER: LTC Mary Fuller, Product Manager, Army Small Computer Program, AMSEL-IS-SCP, (732) 427-6791.

Product Manager:  
LTC Mary Fuller  
Small Computer Program  
(732) 427-6791

POINT PAPER

SUBJECT: Army Personal Computer-3 (PC-3)

OBJECTIVE: PC-3 is the acquisition of Commercial-Off-The Shelf (COTS) general purpose, office automation technology to support the next generation of software under DOS and Multi-user operating systems to satisfy Army, Navy, Air Force, DoD agencies and Civilian federal agencies' personal computer requirements.

FACTS:

- Army Technical Architecture (ATA) certified products that will support worldwide Army/DoD/Civilian agencies' personal computer requirements. This acquisition will follow the Army Personal Computer-2 (PC-2) contract which is scheduled to expire in the 2nd Qtr FY99.
- All monitors and printers will be Energy Star compliant.
- All equipment provided will be Year 2000 compliant.
- Complies with all DoD technical directives/standards, including the Technical Architecture Framework for Information Management (TAFIM).
- Milestones listed below reflect the planned schedule for PC-3. All schedules are planned to provide procurement coverage for Army, DoD and Civilian agency users worldwide.

\*\*RFP Release  
\*\*Contract Award

3rd Qtr FY98  
1st Qtr FY99

- This will be a Best Value evaluation with a minimum of 2 awards. The procurement is planned to run for 2 years for ordering. Electronic Order Processing is projected. The procurement will be a FFP ID/IQ award.

BRIEFER: LTC Mary Fuller, Product Manager, Army Small Computer Program, AMSEL-IS-SCP, (732) 427-6791.

Product Manager:  
LTC Mary Fuller  
Small Computer Program  
(732) 427-6791

# PROGRAM OBJECTIVE

---

**Provide a source of small and medium size Commercial Off-the-Shelf computers (Hardware, Software, Networking, Infrastructure support services) for the Army Power Projection Base, Strategic and Theater Tactical users.**

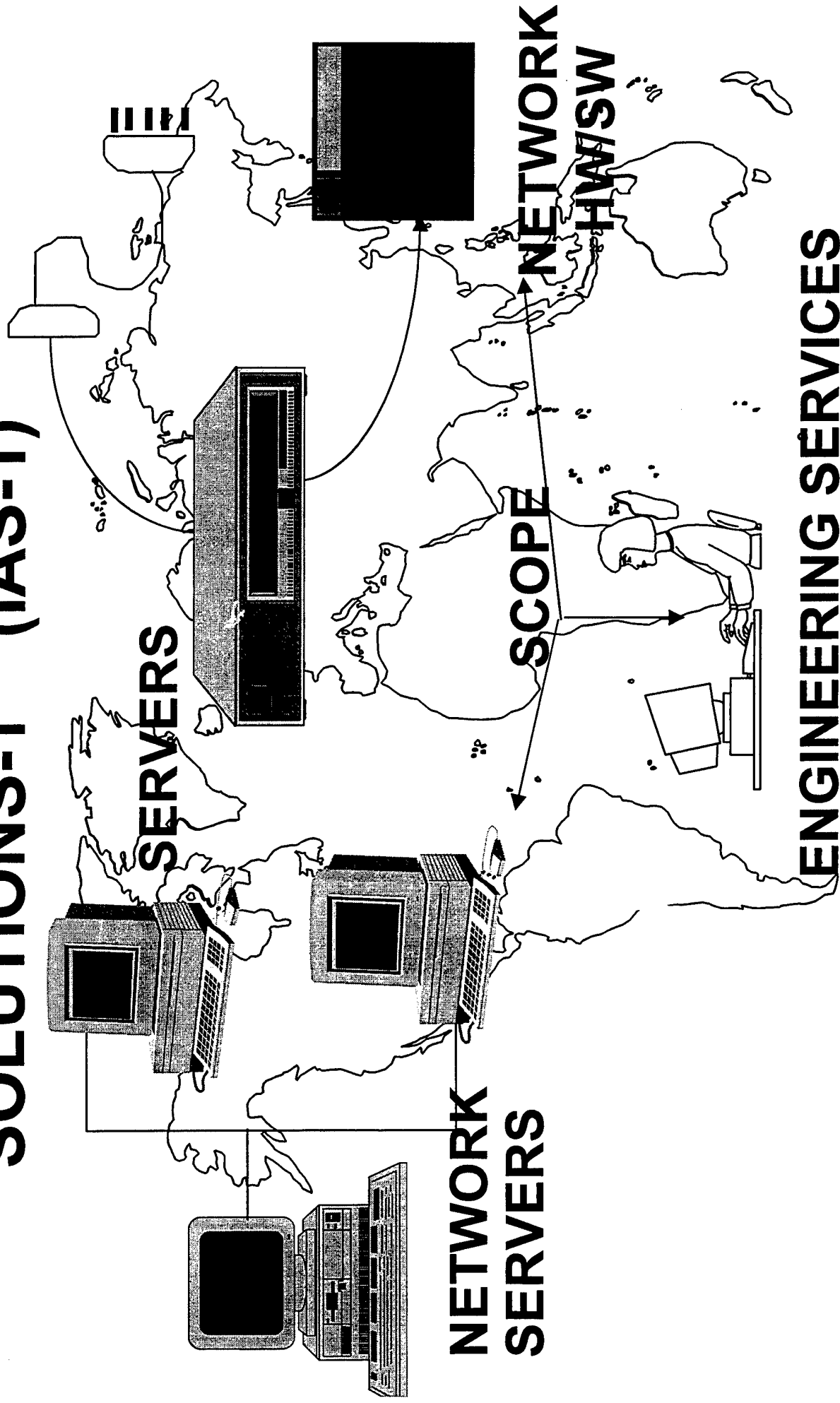
---



# CONTRACT ACTIVITIES

<i>Order Dollar Value</i>						
<i>Total Orders Processed</i>						
\$244M	\$329M	\$321M	\$388M	\$380M	\$363M	
11,256	18,378	15,582	18,600	15,709	10,246	
FY92	FY93	FY94	FY95	FY96	FY97	

# INFRASTRUCTURE ARCHITECTURE SOLUTIONS-1 (IAS-1)



# **IAS-1 DEFINITION**

**ACQUISITION OF COMMERCIAL-OFF-THE-SHELF (COTS)  
SERVER & NETWORK SERVER COMPUTER EQUIPMENT,  
SOFTWARE, NETWORKING COMPONENTS, & TECHNICAL  
SUPPORT SERVICES TO SUPPORT ARMY, NAVY,  
AIR FORCE, DOD, AND CIVILIAN AGENCIES' INTEGRATED  
DESKTOP MANAGEMENT REQUIREMENTS.**

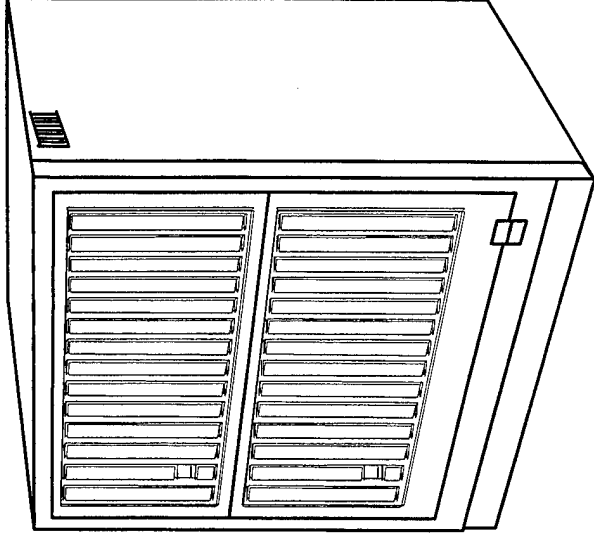
# **IAS-1 OBJECTIVES**

- **SUPPORT ARMY, NAVY, AIR FORCE, DOD AND CIVILIAN AGENCIES' NETWORK SERVER REQUIREMENTS**
- **COMMERCIAL-OFF-THE-SHELF (COTS)**
- **FFP ID/IQ (BEST VALUE AWARD)**
- **SINGLE AWARD**
- **1 YEAR WITH 4 OPTION YEARS**
- **5 YEAR WARRANTY**
- **ELECTRONIC ORDER PROCESSING PROJECTED**



# IAS-1 REQUIREMENTS

- STATE-OF-THE-ART PLATFORMS (COTS)
- OPEN SYSTEMS STANDARDS COMPLIANCE
- NETWORK SERVERS W/CLUSTER SW
- DESKTOP MANAGEMENT SOFTWARE
- NETWORKING COMPONENTS
- SECURITY - FIREWALLS
- CLIENT/SERVER APPLICATIONS
- Y2K MANDATORY
- TECHNICAL SUPPORT SERVICES



# CONTRACT OPPORTUNITY

## TITLE:

INFRASTRUCTURE ARCHITECTURE  
SOLUTIONS-1 (IAS-1)

## OBJECTIVE:

ARMY/JOINT SERVICE  
NETWORK SERVERS/SOLUTIONS FOR  
OFFICE AUTOMATION REQUIREMENTS

## PROPOSED CONTRACT TYPE:

FFP ID/IQ (BEST VALUE AWARD)

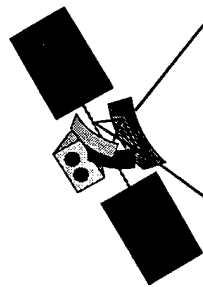
## KEY MILESTONES:

RFP RELEASE - 4TH QTR FY98,  
AWARD - 1ST QTR FY 99

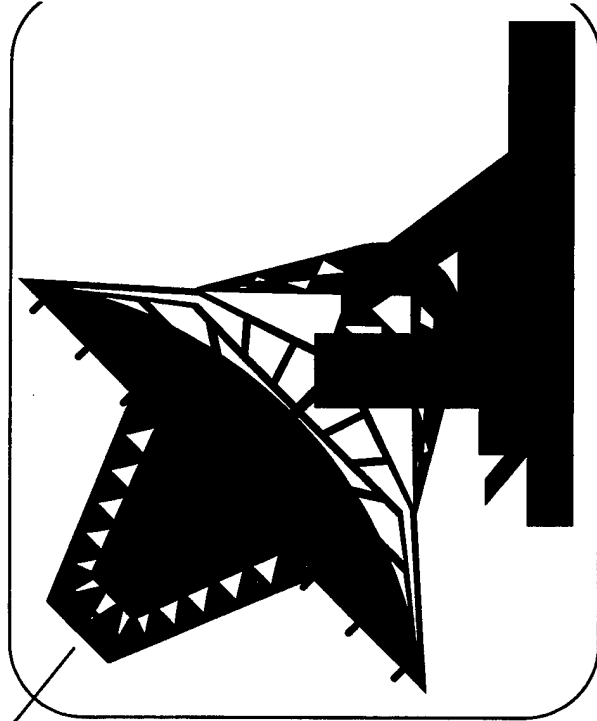
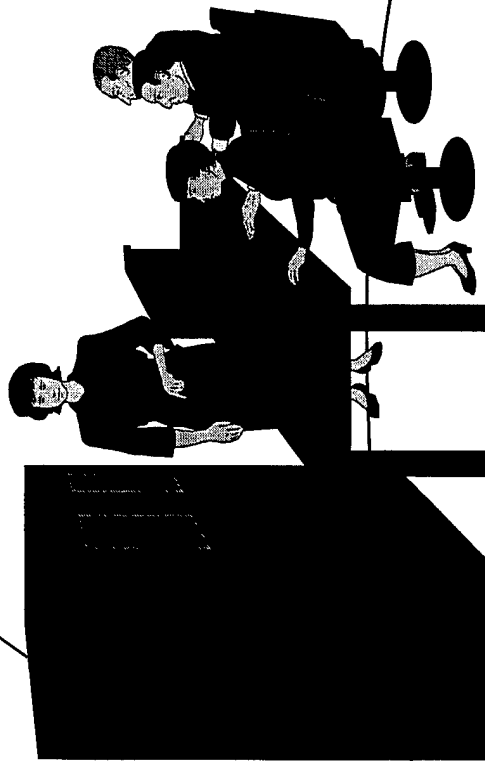
ESTIMATED VALUE: \$200-\$250M

POC: PM SCP: ADELIA WARDLE, (732) 427-6793

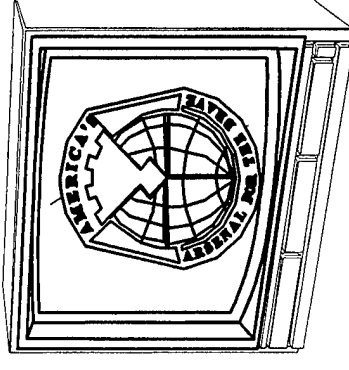
CECOM ACQUISITION-WASH; MARY O'HARA (703) 325-3343



# ARMY VIDEO TELECONFERENCING-1 (VTC-1)



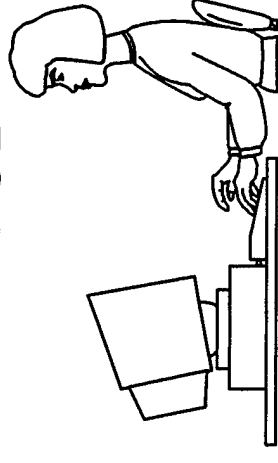
# **VTC-1 DEFINITION**



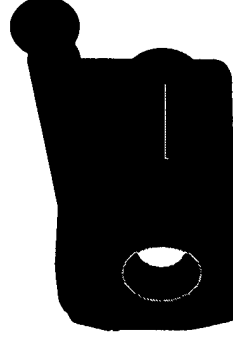
**ACQUISITION OF PRODUCTS AND SERVICES  
TO SUPPORT THE ARMY'S RAPIDLY-EVOLVING  
VIDEO TELECONFERENCING REQUIREMENTS  
TO BE USED BY THE ARMY, DOD, AND CIVILIAN  
AGENCIES WITH BOTH CONUS AND OCONUS  
PERSPECTIVES.**

# VTC-1 OBJECTIVES

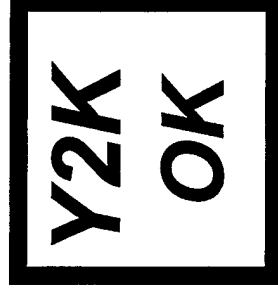
- PROVIDE VTC PRODUCTS AND SERVICES TO THE DOD AND CIVILIAN AGENCIES
- WORK MUST:  
COMPLY WITH THE TAFIM, THE JTA/ATA,  
AND THE DII COE



- WORLD-WIDE FOCUS - FOLLOW-ON TO ARMY DVTC  
CONTRACTS HELD BY DELTA AND TRW



- 2 OR MORE VENDORS
- 2-3 YEAR ORDERING WINDOW
- ELECTRONIC ORDER PROCESSING PROJECTED
- SOLUTIONS BASED
- Y2K MANDATORY



# **VTC-1 REQUIREMENTS**

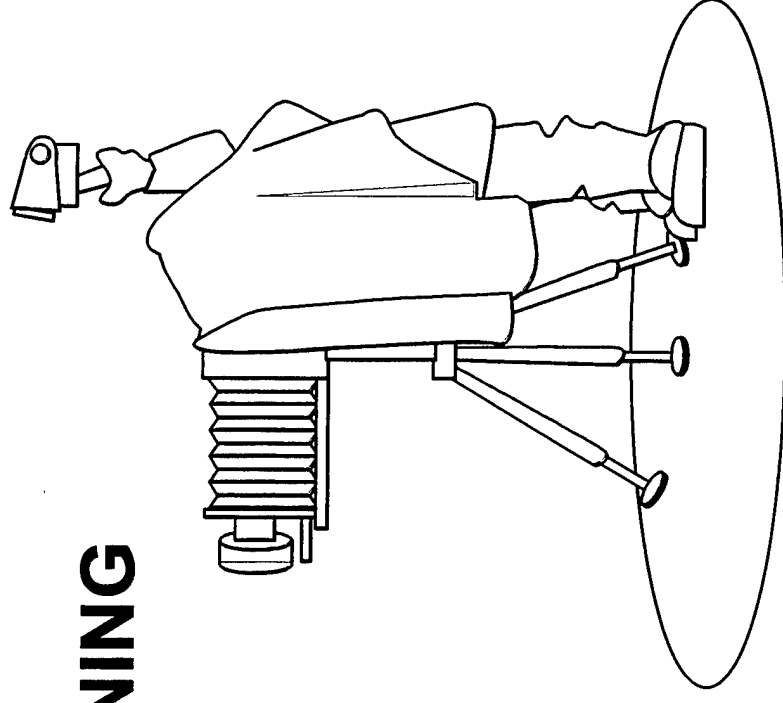
## **ENHANCEMENTS/UPGRADES TO EXISTING SYSTEMS**

### **ROLL-ABOUT AND MULTI-CAMERA SYSTEMS**

#### **SUPPORT OF DISTANCE LEARNING**

##### **INTERFACES FOR:**

- ATM**
- POTS**
- SATELLITE LINKS**
- INTERNET/INTRANET**
- ISDN**



# **CONTRACT OPPORTUNITY**

**TITLE:** VIDEO TELECONFERENCING-1 (VTC-1)

**OBJECTIVE:** VIDEO TELECONFERENCING FOR  
ARMY/DOD/CIVILIAN AGENCIES  
FOR INFO TECHNOLOGY PROGRAMS

**PROPOSED CONTRACT** BLANKET PURCHASE AGREEMENT  
COTS HW/SW

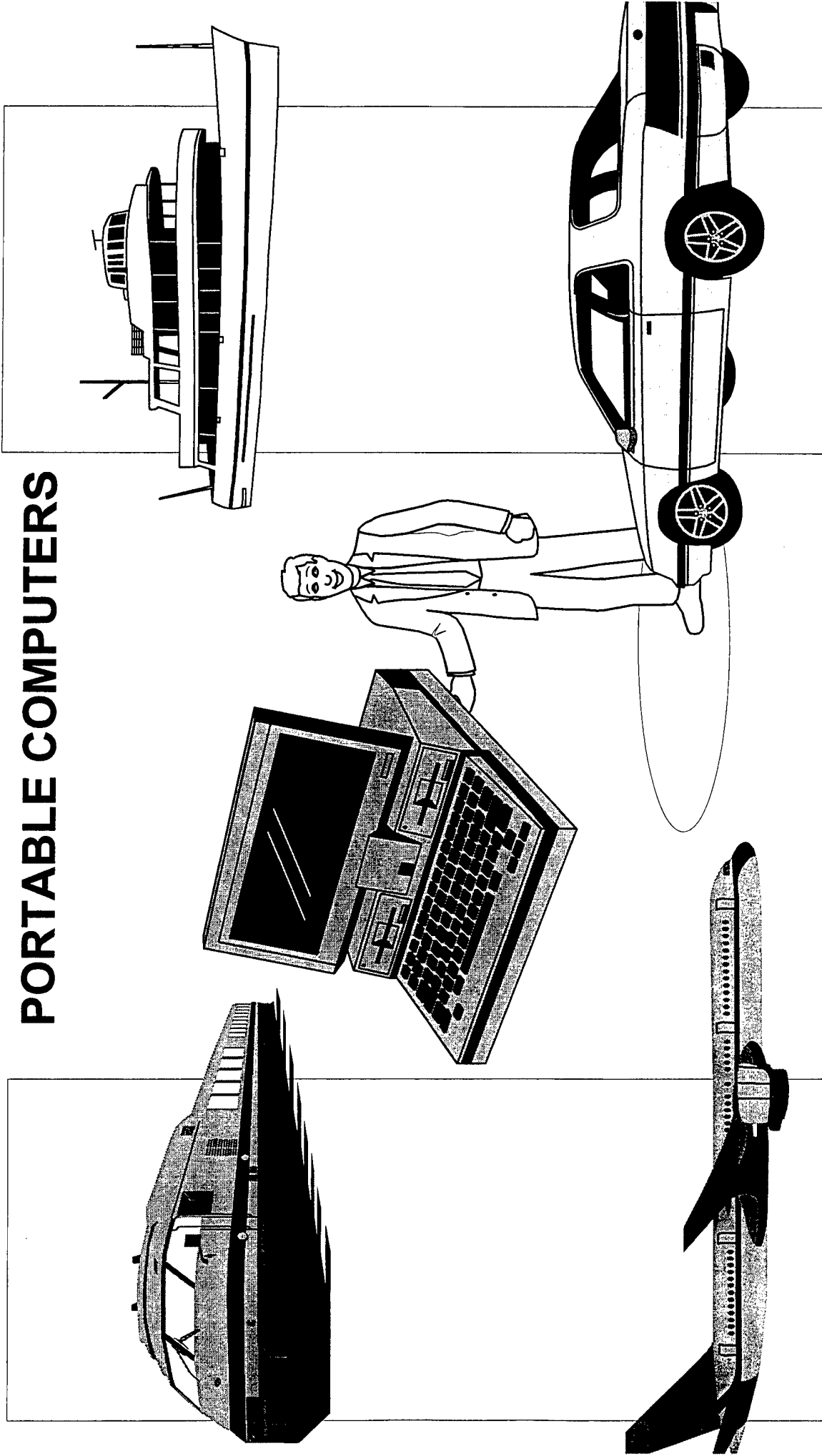
**MILESTONES:** RFQ RELEASE 3RD QTR FY 98  
AWARD 4TH QTR FY 98

**ESTIMATED VALUE: \$25 - \$75M**

**POC: PM-SCP MARK CORZINE, (732) 427-6792**  
**CECOM ACQUISITION-WASH; LEE HARVEY (703) 325-3306**

# PORTABLE-3

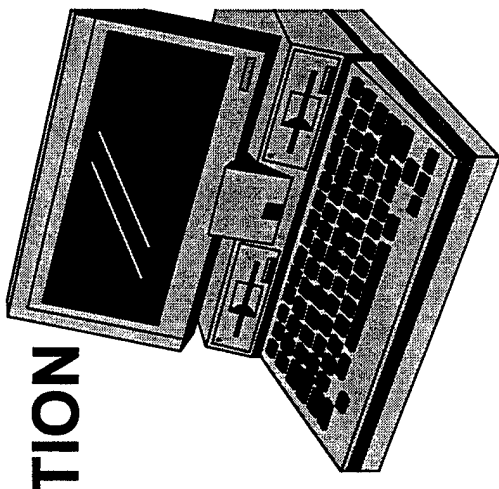
## PORTABLE COMPUTERS





# **PORTABLE-3 DEFINITION**

**ACQUISITION OF COMMERCIAL-OFF-THE-SHELF(COTS)  
GENERAL PURPOSE NOTEBOOKS, SUB-NOTEBOOKS,  
MINI-NOTEBOOKS, AND HANDHELD COMPUTERS,  
SOFTWARE AND PERIPHERALS IN SUPPORT  
OF THE ARMY'S PORTABLE COMMUNICATION  
AND COMPUTING MISSIONS.**



# PORTABLE-3 OBJECTIVES

- SUPPORT THE ARMY'S PORTABLE MISSIONS
- ALL COMMERCIAL-OFF-THE-SHELF (COTS)
- FFP ID/IQ (BEST VALUE AWARDS)
- 2 OR MORE AWARDS
- Y2K MANDATORY
- 2 YEAR HW/SW ORDERING
- 36 MONTH MINIMUM WARRANTY
- ELECTRONIC ORDER PROCESSING PROJECTED

[illegible]

**Y2K OK**

# PORTABLE-3 REQUIREMENTS

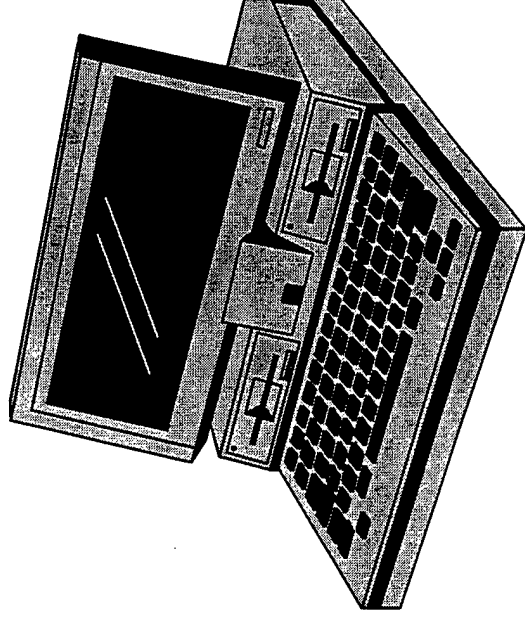
- STATE-OF-THE-ART PLATFORMS  
COTS HARDWARE, SOFTWARE, DOCKING STATIONS,  
PORT REPLICATOR

- SYSTEMS CONFIGURATIONS:  
NOTEBOOK WITH MULTI-MEDIA  
SUB-NOTEBOOK  
MINI-NOTEBOOKS

- HANDHELD (PALMTOP) COMPUTER

- PC-CARD:

MODEM WITH SOFTWARE, RANDOM ACCESS MEMORY (RAM)  
HARD DRIVE, FAX WITH SOFTWARE, NETWORK INTERFACE  
CARD



# CONTRACT OPPORTUNITY

**TITLE:**

ARMY PORTABLE COMPUTER - 3  
(PORT-3)

**OBJECTIVE:**

SUPPORT THE ARMY'S  
REQUIREMENT FOR PORTABLE  
COMMUNICATION AND COMPUTING  
CAPABILITIES

**PROPOSED  
CONTRACT  
TYPE:**

FFP ID/IQ (BEST VALUE AWARDS)  
COTS HW/SW

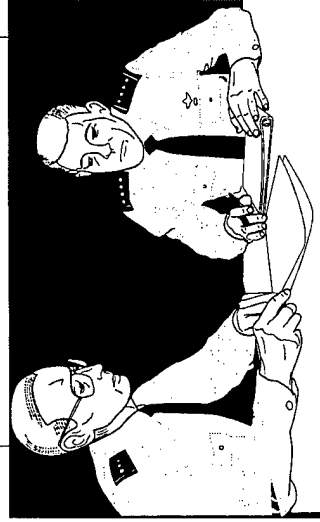
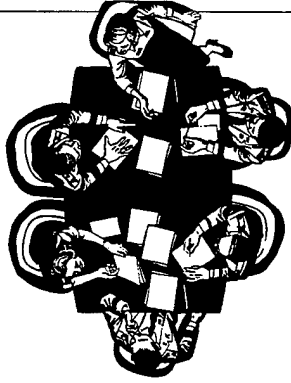
**KEY MILESTONES:** RFP RELEASE 1ST QTR FY 99  
AWARD 3RD QTR FY 99

**ESTIMATED VALUE: \$100M - \$150M**

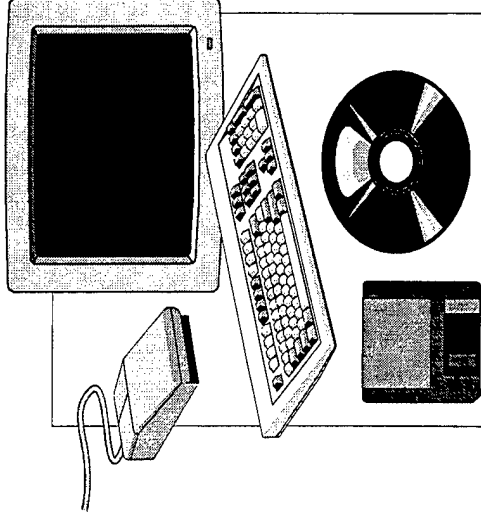
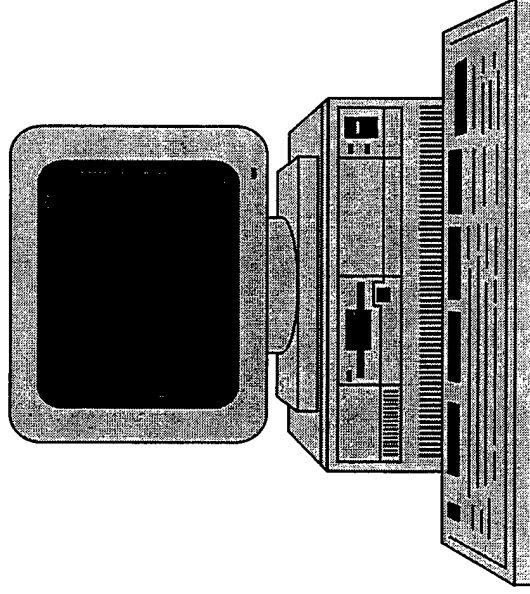
**POC: ANTHONY BATTISTA, PM-SCP (732) 427-6788**  
**CECOM ACQUISITION-WASH; LEE HARVEY (703) 325-3306**

# PERSONAL COMPUTER - 3

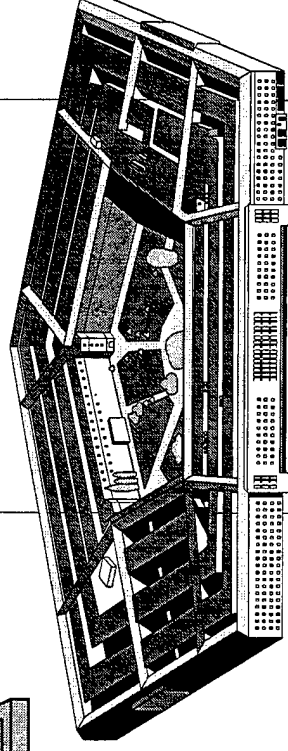
## PC-3



**STRATEGIC MISSIONS**



**SOFTWARE  
& PERIPHERALS**



**POWER PROJECTION**

# **PC-3**

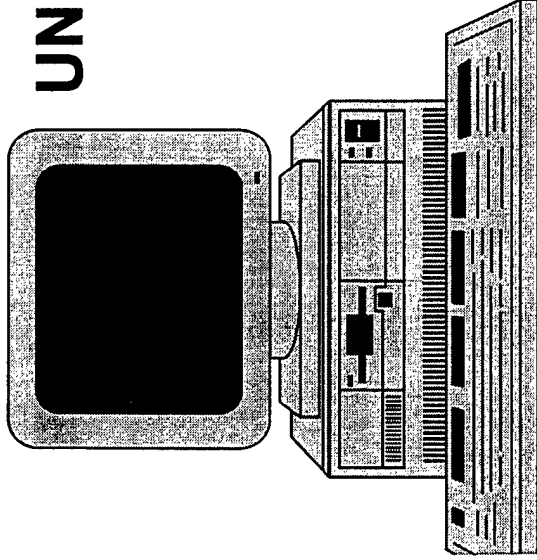
## **DEFINITION**

**ACQUISITION OF COMMERCIAL-OFF-THE-SHELF (COTS)**

**GENERAL PURPOSE, OFFICE AUTOMATION TECHNOLOGY**

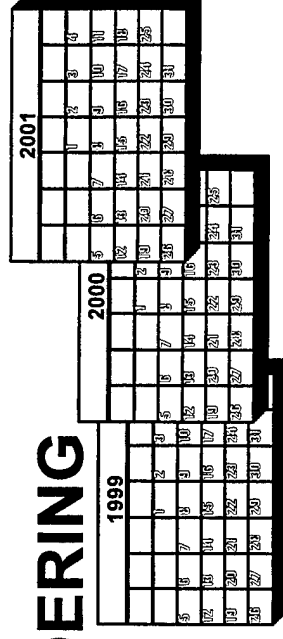
**TO SUPPORT THE NEXT GENERATION OF SOFTWARE**

**UNDER POSIX AND DOS OPERATING SYSTEMS.**



# 3000

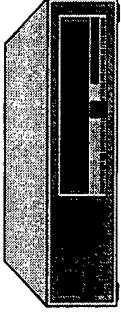
- 2 OR MORE AWARDS**



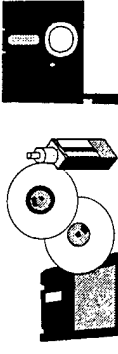
**Y2K OK**

# PC-3 REQUIREMENTS

- **STATE-OF-THE-ART PLATFORMS-COTS**

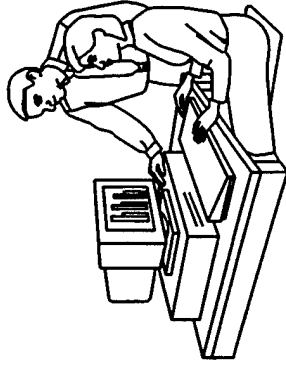


HARDWARE, SOFTWARE, SINGLE & MULTI-USER OPERATING SYSTEMS



- **OPEN SYSTEMS STANDARDS COMPLIANCE**

TECHNICAL ARCHITECTURE FRAMEWORK FOR INFORMATION MANAGEMENT (TAFIM) INCLUDES POSIX, ETC.



- **SYSTEMS CONFIGURATIONS:**

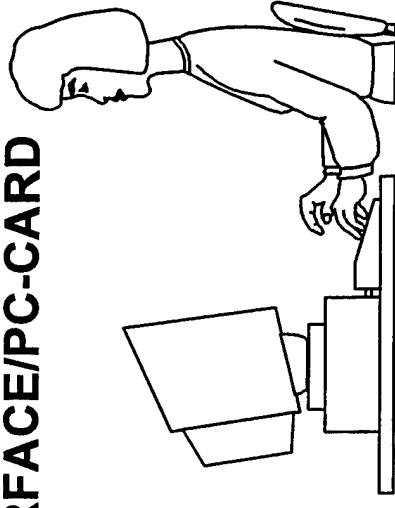
BUNDLED PC AND/OR USER-CONFIGURED PC

- **PERIPHERALS:**

17" AND 21" MONITORS, PRINTERS, (PCMCIA) INTERFACE/PC-CARD

- **DVTC (POTS/ISDN) OPERATIONAL**

- **OS WITH INTEGRATED BROWSERS**





# **CONTRACT OPPORTUNITY**

**TITLE: ARMY PERSONAL COMPUTER - 3**

**OBJECTIVE: SUPPORT NEXT GENERATION OF  
SOFTWARE UNDER POSIX/DOS OS**

**PROPOSED FFP ID/IQ (BEST VALUE AWARDS)  
CONTRACT COTS HW/SW  
TYPE:**

**KEY MILESTONES: RFP RELEASE 3RD QTR FY 98  
AWARD 1ST QTR FY 99**

**ESTIMATED VALUE: \$200-\$300M**

**POC: PM SCP LINDA COOK,(732) 427-6596  
CECOM ACQUISITION-WASH; LEE HARVEY (703) 325-3306**



# NOTES



**LTLCS**  
*Long Term Life Cycle Support*

# ***LTLCS Acquisition***

Eric Swenson, Chief Systems Management Division

*Unclassified*

**POINT PAPER****Subject:** Long Term Life Cycle Support (LTLCS)

**Objective:** LTLCS is the acquisition of Commercial Off the Shelf (COTS) products and services to satisfy a customer's requirement to support their installation's switched system. LTLCS contracts support switched systems manufactured by NORTEL, Lucent and AG Communications Systems.

**Facts:**

- Two LTLCS efforts are involved. One for support of NORTEL switching systems and one for support of AG Communications Systems.
- Contracts will be Indefinite Delivery Indefinite Quantity. They will be awarded using FAR Part 12, Commercial Acquisition. Each contract will be one year with four one-year options.
- Customers provide funding for each requirement.
- Contracts will provide the following: software upgrades, hardware enhancements, technical assistance, parts repair, parts replenishment, training, technical assistance, remote diagnostics, labor services and extended warranty services.
- Milestones listed below reflect planned schedule for the LTLCS contracts.

	<u>NORTEL</u>	<u>AG Comm Systems</u>
Draft RFP Release	4 <sup>th</sup> Qtr FY00	3 <sup>rd</sup> Qtr FY01
RFP Release	1 <sup>st</sup> Qtr FY01	4 <sup>th</sup> Qtr FY01
Contract Award	4 <sup>th</sup> Qtr FY01	3 <sup>rd</sup> Qtr FY02

**Briefer:** Eric Swenson, Chief Systems Management Division, (732) 532-7976

# ***Program Description***

# *LTLCS*

*Long Term Life Cycle Support*



The LTLCS program provides the means for a customer to obtain all the products and services required to support an installation's switched system through the use of Indefinite Delivery/Indefinite Quantity (ID/IQ) contracts.

# ***Program Requirements***

# LTLCs

*Long Term Life Cycle Support*



LTLCs contracts support Nortel, Lucent Technologies and AG Communications Systems switched systems. LTLCs supports the following switches:

- Nortel SL-1
- Nortel SL-100
- Nortel DMS-100
- AGCS GTD-5
- Lucent Technologies Definity
- Lucent Technologies 5ESS

# **Program Requirements**

# LTLCS

*Long Term Life Cycle Support*



LTLCS contracts also support Telephone Management Systems and Directory Assistance Management Systems from the following vendors:

- ACE \* COMM
- Telecommunications Management Associates
- Telemate
- K&R Custom Software
- Unique Communications

# ***Contract Services***

# *LTLCs*

*Long Term Life Cycle Support*



- the latest software
- hardware enhancements
- technology upgrades
- remote diagnostics
- technical assistance
- training
- spare parts
- parts repair
- technical documentation
- and much more...



# **Status of Program**

# LTLCs

*Long Term Life Cycle Support*



The LTLCs program commenced in July 1992 with the first LTLCs contract DAAB07-92-D-E026. This contract was used to support Nortel Switched Systems.

LTLCs presently supports the following customers:

- |           |           |                |
|-----------|-----------|----------------|
| • AMC     | • DISA    | • TRADOC       |
| • ARCENT  | • FORSCOM | • USN/USMC     |
| • ASC     | • MDW     | • USARC        |
| • COE     | • MEDCOM  | • US AIR FORCE |
| • CINCPAC | • NGB     |                |

# **Status of Program**

# LTLCS

*Long Term Life Cycle Support*



The LTLCS program currently has three contacts:

- DAAB07-96-D-L260 Nortel Systems was awarded 31 July 1996 to GTE Government Systems Corp.
- DAAB07-97-D-L756 AG Communications Systems was awarded 23 May 1997 to GTE Government Systems Corp.
- DAAB07-98-D-L771 Lucent Technologies Systems was awarded on 26 November 1997 to Halifax Engineering Inc.

# ***Contract Opportunities***

# ***LTLCS***

*Long Term Life Cycle Support*



**Title:** LTLCS for Nortel Switched Systems

**Objective:** LTLCS contract for support of Nortel Switched Systems

**Proposed Contract Type:** ID/IQ, Best Value award, COTS acquisition, 1 year with 4 one year options

**Estimated Value:** \$120M - \$130M

**Key Milestones:**      Proposed RFP Release Date: 1st Qtr FY01  
                                 Proposed Award Date: 4th Qtr FY01

**POC:** Eric Swenson   Telephone # (732) 532-7976

**Contract POC:** Anthony Infanti   Telephone # (732) 532-1124

# **Contract Opportunities**

# LTLCS

*Long Term Life Cycle Support*



**Title:** LTLCS for AGCS Switched Systems

**Objective:** LTLCS contract for support of AG Communications Systems (AGCS) Switched Systems

**Proposed Contract Type:** ID/IQ, Best Value source selection, COTS acquisition, 1 year with 4 one year options

**Estimated Value:** \$27M - \$37M

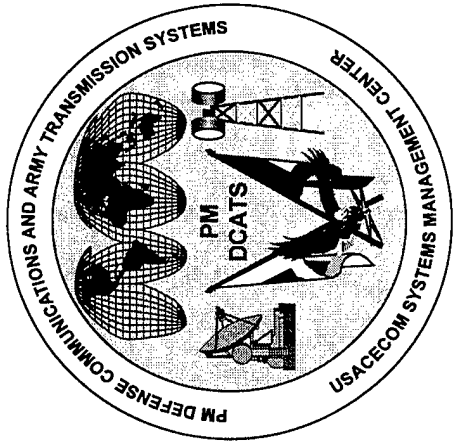
**Key Milestones:**      Proposed RFP Release Date: 4th Qtr FY01  
                                 Proposed Award Date: 3rd Qtr FY02

**POC:** Eric Swenson Telephone # (732) 532-7976

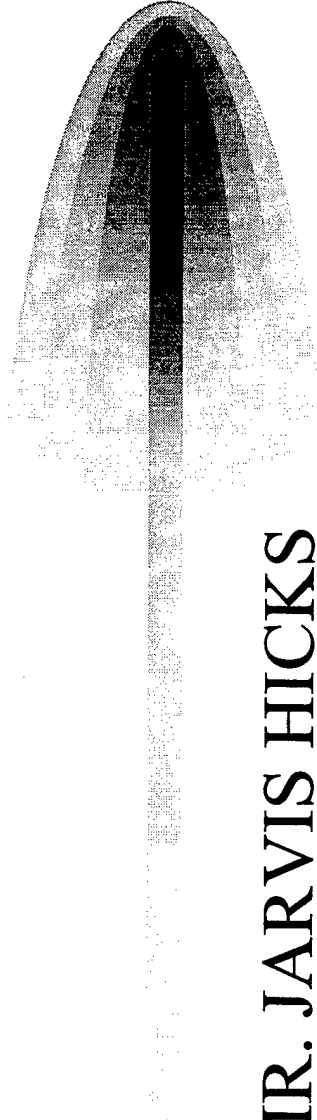
**Contract POC:** Anthony Infanti Telephone # (732) 532-1124



# NOTES



# *PMDCATS BUSINESS OPPORTUNITIES*



MR. JARVIS HICKS  
ASSISTANT PROJECT MANAGER  
DEFENSE SATELLITE  
COMMUNICATIONS SYSTEM (DSCS)  
CONTROL

UNCLASSIFIED

AMSEL-DSA-TSD

## POINT PAPER

SUBJECT: Global Terrestrial Critical Control Circuit - (GTC3)

OBJECTIVE: GTC3 will replace the current Smart Multi-Circuit Terminal System II (SMCTII). The Government has a need to replace the aging SMCTII with new or upgraded hardware/software, which will carry the DSCS Global Terrestrial Critical Control Circuit information. The improved global communications equipment will provide a number of additional improvements to include:

- Enhanced routing and message archiving
- Improved message error alert/correction
- Rapid/responsive network and local node reconfiguration
- Redefined user friendly audit trail access and retrieval
- Detailed message statistics
- Extend error message files and greater storage capacity
- Attended or remote operation capacity

### FACTS:

- The GTC3 will be Joint Technical Architecture - Army (JTA) and Common Operating Environment (COE) compliant.
- A competitive Firm Fixed Price acquisition for commercial off the shelf (COTS) or modified COTS equipment is planned.
- Milestones listed below reflect the planned schedule for the GTC3 program.

RFP Release 4QFY98  
Contract Award 2QFY99

BRIEFER: Mr. Jarvis B. Hicks, Assistant Project Manager, Defense Satellite Communications Satellite Control, AMSEL-DSA-TSD, (732) 532-9728 X 5824

AMSEL-DSA-TSD

POINT PAPER

SUBJECT: Replacement Defense Satellite Communications System (DSCS) Frequency Division Multiple Access (FDMA) Communications System (DFCS) - (RDFCS)

OBJECTIVE: RDFCS will replace the current DFCS to provide automated power control of FDMA communications links operating over current DSCS satellites as well as any follow-on DSCS satellites. RDFCS will also provide an orderwire link between the RDFCS Network Control Terminals (NCT's), located at DSCS Operations Centers (DSCSOC's) and the Network Terminals (NT's) installed at individual Earth Terminals. A commercial Off the Shelf (COTS) solution is preferred.

FACTS:

- The RDFCS will be Joint Technical Architecture - Army (JTA) and Common Operating Environment (COE) compliant.
- A competitive Firm Fixed Price acquisition is planned.
- Milestones listed below reflect the planned schedule for the RDFCS program.

RFP Release 1QFY00  
Contract Award 2QFY00

BRIEFER: Mr. Jarvis B. Hicks, Assistant Project Manager, Defense Satellite Communications Satellite Control, AMSEL-DSA-TSD, (732) 532-9728 X 5824



AMSEL-DSA-TSD

POINT PAPER

SUBJECT: Common Network Planning Software - (CNPS)

OBJECTIVE: CNPS will replace the current Defense Satellite Communications System (DSCS) Network Planning Software (DNPS) to plan communications services supported by the DSCS. Although CNPS will initially plan services only on DSCS satellites the CNPS shall be a generic planner capable of planning services on other SHF space assets including commercial transponders operating on C, Ku and Ka bands as well as any follow-on DSCS satellites. It will operate at the DSCS Operations Centers (DSCSOCs) as well as Defense Information Systems Agency (DISA) and the United States Army Space Command Management sites. It is intended that CNPS will reduce operator workload and life cycle maintenance costs.

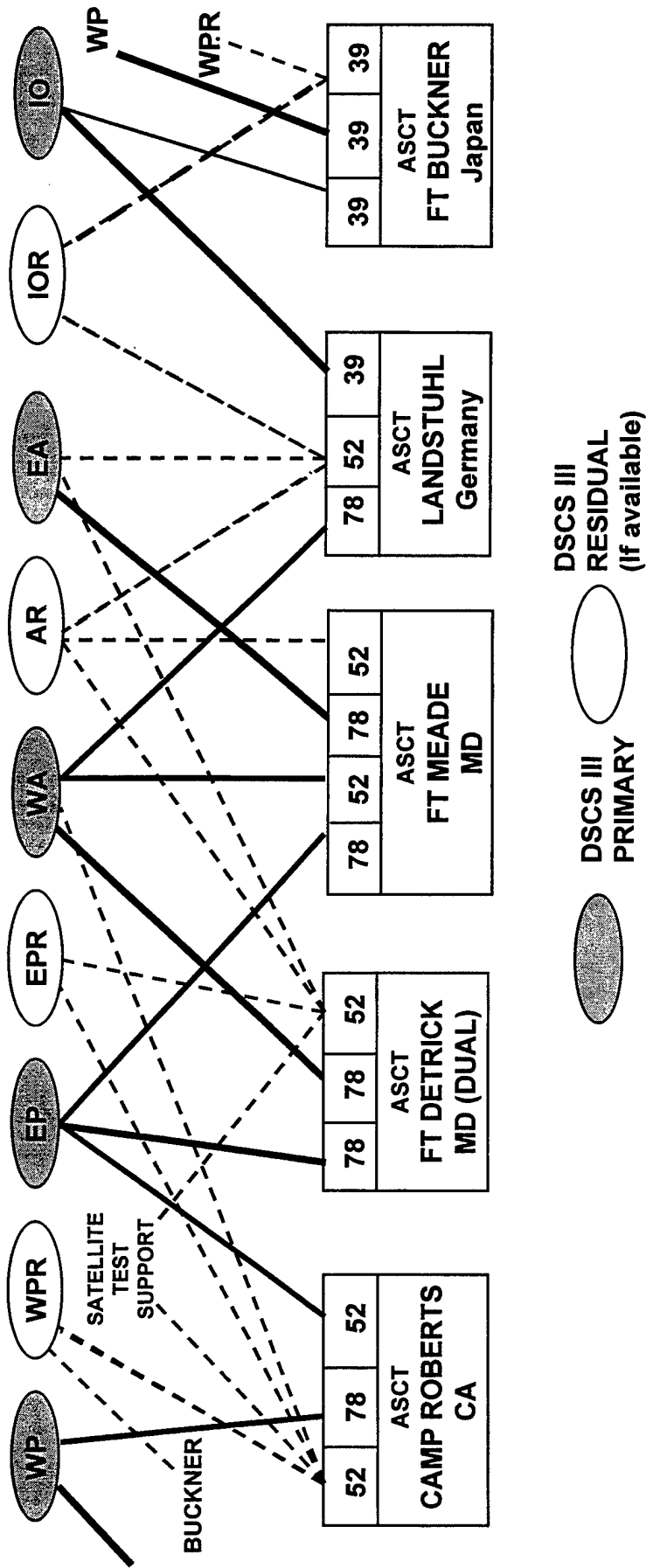
FACTS:

- The CNPS will be Joint Technical Architecture - Army (JTA) and Common Operating Environment (COE) compliant.
- A competitive Cost Plus Fixed Fee acquisition is planned.
- Milestones listed below reflect the planned schedule for the CNPS program.

RFP Release 4QFY98  
Contract Award 2QFY99

BRIEFER: Mr. Jarvis B. Hicks, Assistant Project Manager, Defense Satellite Communications Satellite Control, AMSEL-DSA-TSD, (732) 532-9728 X 5824

# DSCS SATELLITE NETWORK

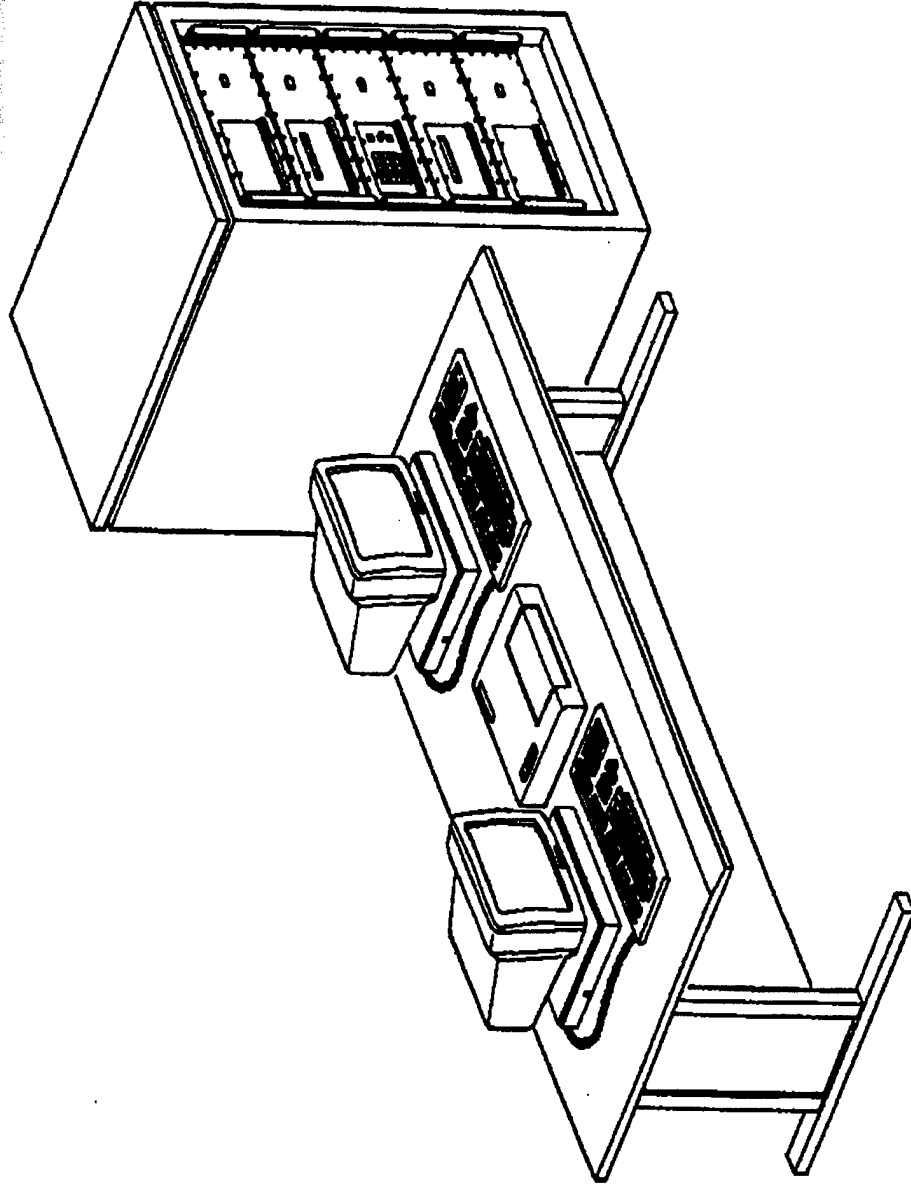


78=AN/FSC-78 52=AN/GSC-52 39=AN/GSC-39  
ASCT=AUXILIARY SATELLITE CONTROL TERMINAL

PRIMARY ——— SECONDARY - - - - - ASCT



# ***GLOBAL TERRESTRIAL CRITICAL CONTROL CIRCUIT (GTC3)***

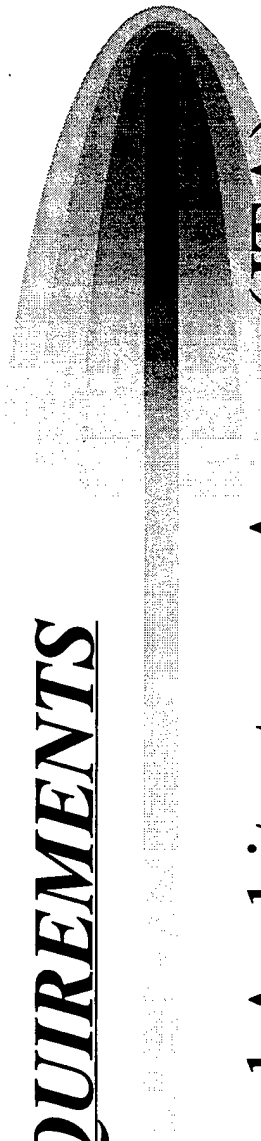


# ***GLOBAL TERRESTRIAL CRITICAL CONTROL CIRCUIT SYSTEM DEFINITION***



- Replace Smart Multi-Circuit Terminal II System
- Provide Improved Global Communications Equipment to:
  - Enhance routing & message archiving
  - Improve message error alert/correction
  - Rapid network & local node reconfiguration
  - Detail message statistics
  - Extend error message files and greater storage capacity

# ***GLOBAL TERRESTRIAL CRITICAL CONTROL CIRCUIT SYSTEM REQUIREMENTS***



- Joint Technical Architecture- Army (JTA)  
and Common Operating Environment  
(COE) compliant
- Modular and Extensible System  
Architecture
- World Wide Deployment/Application

# ***GLOBAL TERRESTRIAL CRITICAL CONTROL CIRCUIT CONTRACT OPPORTUNITY***

## **Objective:**

Non-Developmental Item (NDI)

Acquisition

## **Proposed Contract Type:**

Firm Fixed Price

## **Key Milestones:**

RFP Release:

Sep 98

Award:

Feb 99

## **Estimated Value:**

\$2M to \$3M

## **Tech POC/Tel#:**

Mr. Victor Phillipuk

732-532-9728 Ext 5821

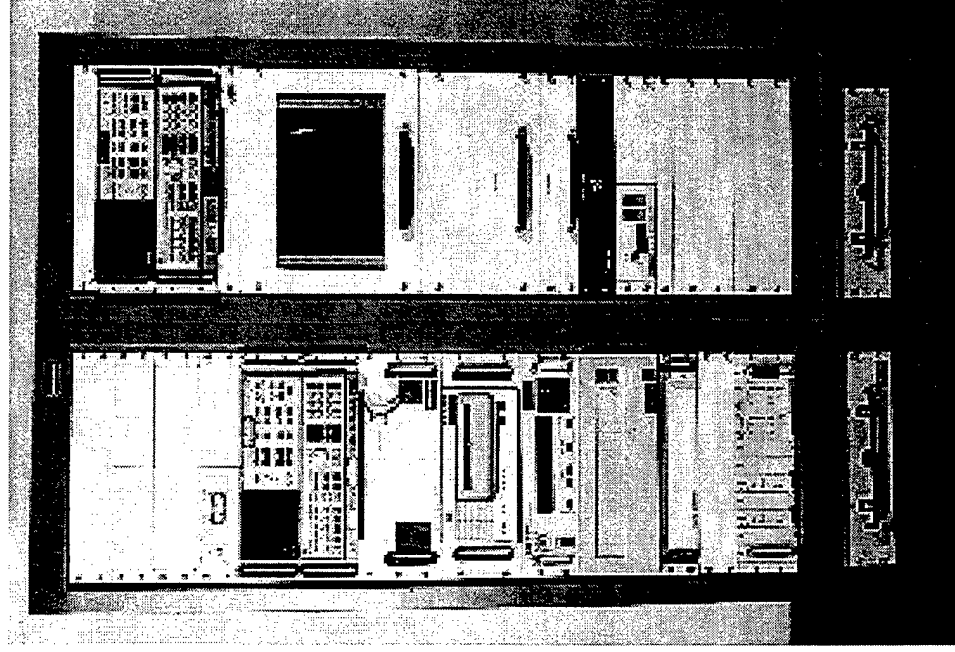
## **Contract POC/Tel#:**

KO - Ms Kathleen Rizzo

Specialist -June Stone

732-532-2924

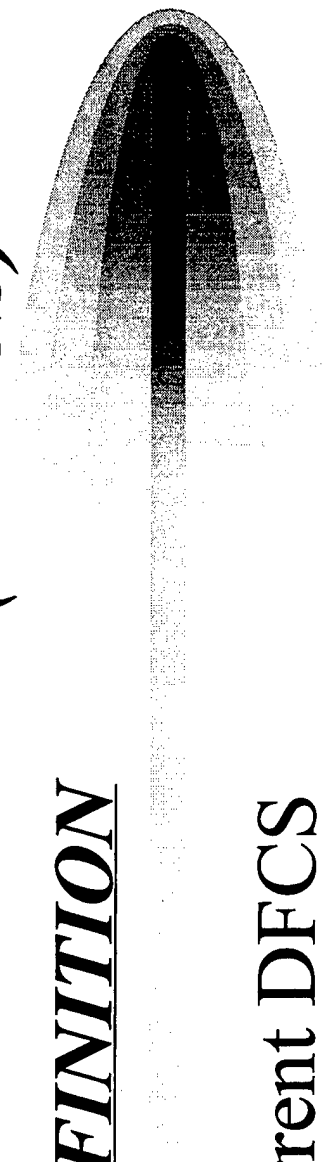
REPLACEMENT DSCS FREQUENCY  
DIVISION MULTIPLE ACCESS (FDMA)  
CONTROL SUBSYSTEM (RDFCS)





# ***REPLACEMENT DSCS FDMMA CONTROL SUBSYSTEM (RDFCS)***

## **SYSTEM DEFINITION**



- Replace Current DFCS
- Provide Automated Power Control of FDMMA Comm Links over current DSCS and Follow-On DSCS Satellites
- Provide Covered Orderwire Link between RDFCS Network Control Terminal (NCT) at DSCSOCs and Network Terminal (NT) at Earth Terminals

***REPLACEMENT DSCS FDMA  
CONTROL SUBSYSTEM (RDFCS)  
SYSTEM REQUIREMENTS***

- Joint Technical Architecture- Army (JTA) and Common Operating Environment (COE) compliant
- Compliant with Draft Fixed Satellite Service (FSS) Standard

# ***REPLACEMENT DSCS FDMA CONTROL SUBSYSTEM CONTRACT OPPORTUNITY***

**Objective:** Non-Developmental Item (NDI)

Acquisition

**Proposed Contract Type:** Firm Fixed Price

**Key Milestones:**

RFP Release:

Nov 99

Award:

Feb 00

**Estimated Value:**

\$10M to \$15M

**Tech POC/Tel#:**

Mr. Victor Phillipuk

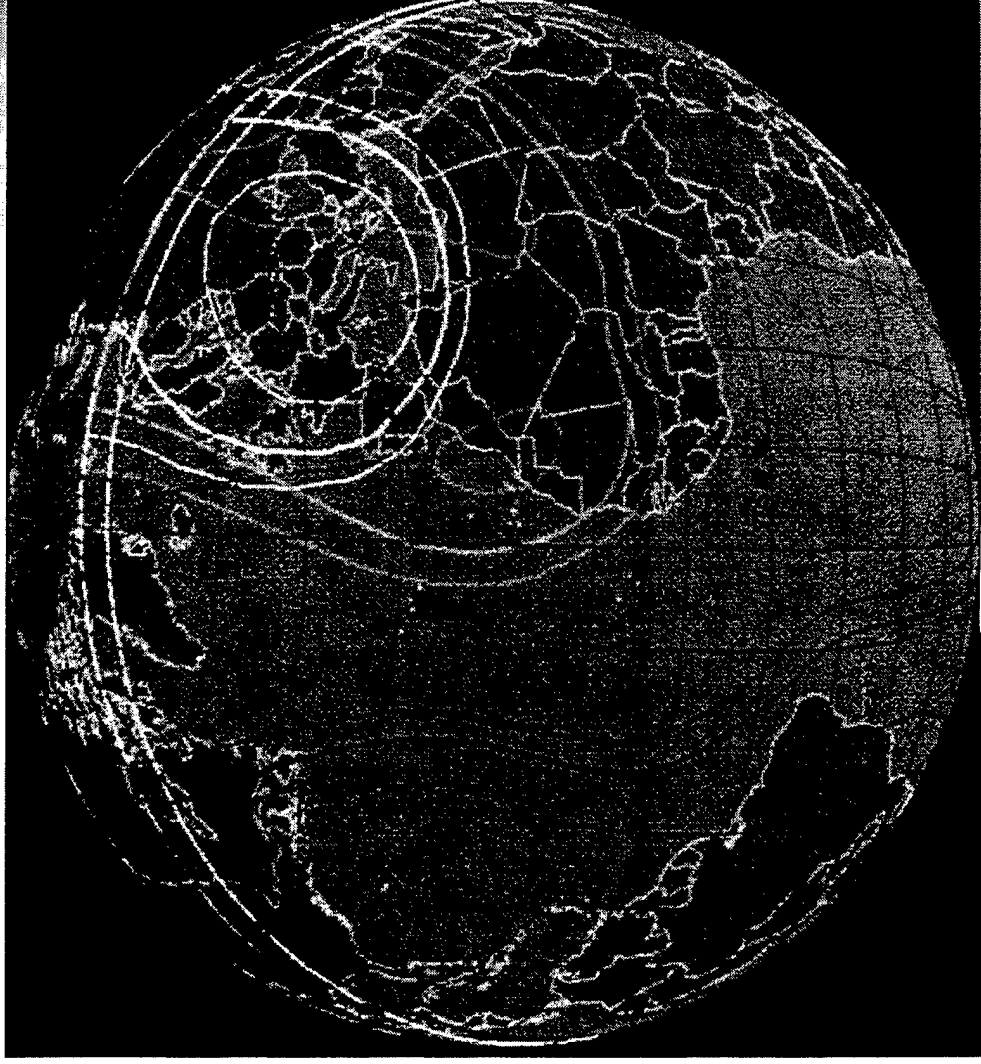
732-532-9728 Ext 5821

**Contract POC/Tel#:**

Ms. Kathleen Rizzo

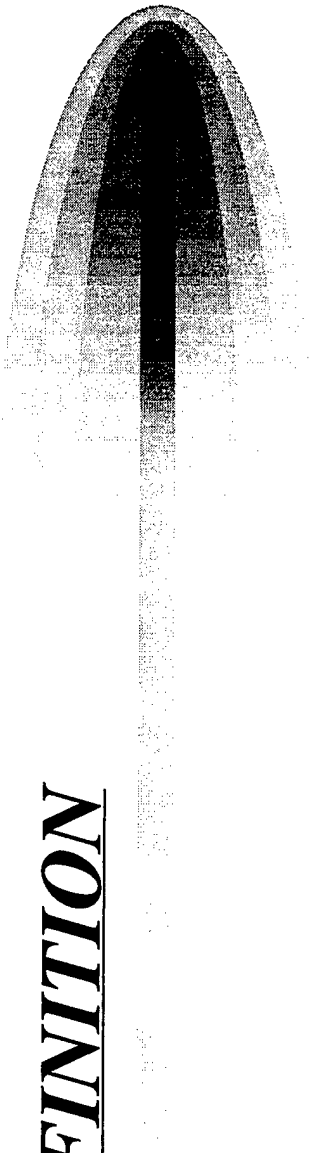
732-532-2924

# ***COMMON NETWORK PLANNING SOFTWARE (CNPS)***



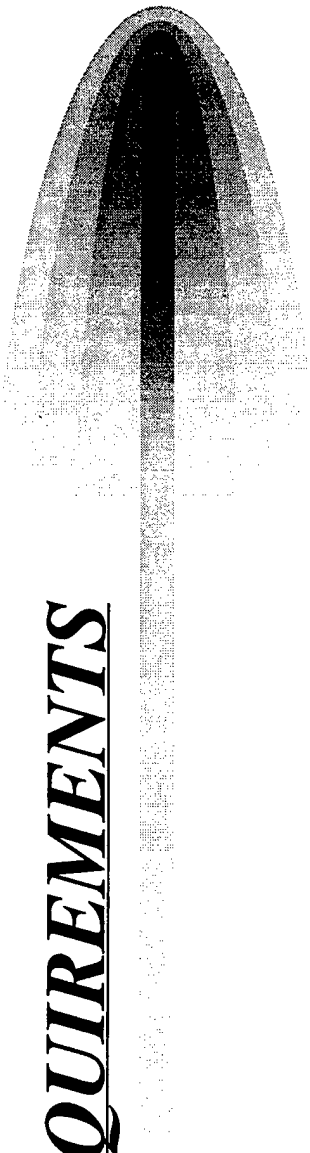
# ***COMMON NETWORK PLANNING SOFTWARE***

## ***SYSTEM DEFINITION***



- Replace Defense Satellite Communications System Network Planning Software
- Plan Defense Satellite Communications System & Commercial SHF links
- Improved planning performance
- Reduce operator workload
- Reduce life cycle maintenance costs

# ***COMMON NETWORK PLANNING SOFTWARE SYSTEM REQUIREMENTS***



- Generic planner
- Retain Critical Defense Satellite Communications  
System Network Planning Software Algorithms
- Easily accommodate enhancements
- Joint Technical Architecture- Army (JTA) and  
Common Operating Environment (COE) compliant

# ***COMMON NETWORK PLANNING SOFTWARE***

## ***CONTRACT OPPORTUNITY***

### **Objective:**

Acquire new Satellite

Comm Network Planning Tool

### **Proposed Contract Type:**

Cost Plus Fixed Fee

### **Key Milestones:**

RFP Release: Sep 98

Award: Jan 99

Begin Fielding: Jun 02

### **Estimated Value:**

\$12M to \$18M

### **Tech POC/Tel#:**

Mr. David Morrissey

732-532-9728 Ext 5808

### **Contract POC/Tel#:**

KO - Ms. Kathleen Rizzo

Specialist - Maria Festa

732-532-2924

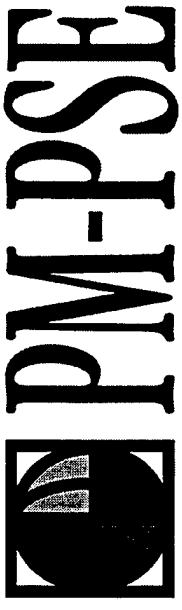


# NOTES





# **PM, Physical Security Equipment Business Opportunities**



**Product Manager, Physical Security Equipment**

**Thomas C. Endler**

**Production, Fielding and  
Sustainability Manager**

**Office of the Product Manager,  
Physical Security Equipment**

**UNCLASSIFIED**

## POINT PAPER

SUBJECT: Mobile Detection Assessment Response System-Interior (MDARS-I)

OBJECTIVE: The MDARS-I will provide commanders an electromechanical means to conduct random navigate in warehouses, office buildings, hospitals and other enclosed structures, while performing intruder detection and inventory assessment.

## FACTS:

- Currently in 6.4 Engineering and Manufacturing Development (EMD) phase.
- A Cost Plus Incentive Fee (EMD) Firm Fixed Price (Production option of non-developmental items) Fixed Price Incentive (Production option of developmental items) contract is envisioned.
- MDARS-I will undergo combined Developmental Testing/Operational Testing (DT/OT).
- Pre-planned Product Improvements (P3I) will include Detection on the Move, Additional non-lethal response capabilities, integration of interior and exterior platforms, and integration with fixed IDS.
- MDARS-I will employ Contractor Life Cycle Support for the life of the system.
- The key MDARS-E milestones are:

RFP Release	3QFY98
Contract Award	1QFY99

BRIEFER: Mr. Tom Endler, Production, Fielding and Sustainability Manager, Office of the Product Manager, Physical Security Equipment, Ft. Belvoir, VA

POINT PAPER

SUBJECT: Mobile Detection Assessment Response System-Exterior (MDARS-E)

OBJECTIVE: The MDARS-E will provide commanders a diesel powered means to semiautonomously conduct random patrols, while performing intrusion detection in general storage yards, arsenals, petroleum storage areas, airfields, rail yards and port facilities.

FACTS:

- Ongoing Broad Agency Announcement contract with Robotic Systems Technology to investigate navigation, communication and intruder detection aspects associated with a exterior robotic vehicle.
- A Cost Plus Incentive Fee (EMD) contract is envisioned.
- MDARS-E will undergo combined Developmental Testing/Operational Testing (DT/OT).
- Pre-planned Product Improvements (P3I) will include employing delay devices, and integration of fixed exterior sensors into a single system.
- MDARS-E will employ Contractor Life Cycle Support for the life of the system.
- The key MDARS-E milestones are:

MS I/II IPR

3QFY99

BRIEFER: Mr. Tom Endler, Production, Fielding and Sustainability Manager, Office of the Product Manager, Physical Security Equipment, Ft. Belvoir, VA

## POINT PAPER

SUBJECT: High-Value Asset Security Container (HVASC)

OBJECTIVE: Provide Commanders a container to secure High Value Items in both garrison and field environments.

## FACTS:

- The HVASC was developed to provide a highly versatile, bulk-storage container to secure high-value, sensitive, and pilferable assets. HVASC was developed to be force resistant and defeat unsophisticated criminals using limited hand tools.
- HVASC is designed to provide commanders a container to secure high-value items in both garrison and field environments. Early user appraisals has been conducted with Army, Navy, and Marine Corps units. A worldwide safety release and a finalized technical drawing package have been completed.
- The Key HVASC milestones are:

Draft RFP	3QFY98
Draft RFP	4QFY98
Award	4QFY98
FUE	1QFY99

- Units will purchase HVASC on a "requirement basis of issue".

BRIEFER: Mr. Tom Endler, Production, Fielding and Sustainability Manager, representing the Product Manager, Physical Security Equipment, Fort Belvoir, VA.

## POINT PAPER

SUBJECT: High-Value Item Security System (HVISS)

OBJECTIVE: Provide Commanders a system to locate and recover High Value Items in both garrison and field environments

## FACTS:

- The HVISS is being developed to protect high-value, pilferable items identified under controlled item inventory codes (CIIC) which are randomly lost, stolen, or misplaced. CIICs items consist of such items as night vision devices, global positioning systems, small arms and small arms repair parts, communication equipment and other items. These items total over 1,5 million pieces of equipment.
- HVISS envisions uses a radio frequency identification (RFID) tag system that can be integrated into the manufacture of items to aid in accounting and recovery of items in garrison and in field with the use of an interrogator unit. The HVISS will consist of a accountability system, miniaturized tag, and interrogator.
- Maximum use will be made of non-developmental items or commercial-off-the-shelf systems. Each asset tag will have an unique identification number. Interrogators will provide electronic accountability and locate and recover functions. It is desired systems will be linked to existing security, administrative, and logistics databases.
- The key HVISS milestones are:

Complete BTA	3QFY99
Complete COEA	2QFY00
Award EMD Contract	1QFY01

BRIEFER: Mr. Tom Endler, Production, Fielding and Sustainability Manager, representing the Product Manager, Physical Security Equipment, Fort Belvoir, VA

## POINT PAPER

SUBJECT: Platoon Early Warning Device - II (PEWD-II)

OBJECTIVES: The PEWD-II is a replacement to the current Platoon Early Warning System (PEWS) and will be a simple, compact, light-weight sensor system capable of detecting intrusions into protected areas and rapidly communicating detection alarm messages.

## FACTS:

- The PEWD-II Acquisition Strategy is to obtain 4926 units through competitive acquisition using commercially-available technology. Projected four-year production costs are \$40M.
- A Fixed Price type of contract is envisioned, with contract award projected for 4QFY99, and a production run to begin 1QFY01.
- The PEWD-II will consist of a hand-held monitor, a minimum of seven sensors with transmitters and a carrying case. The entire unit will not exceed 15.5 pounds.
- The key PEWD-II milestones are:

Draft RFP	2QFY99
Issue RFP	4QFY99
Contract Award	4QFY99

BRIEFER: Mr. Tom Endler, Production, Fielding and Sustainability Manager, Office of the Product Manager, Physical Security Equipment, Ft. Belvoir, VA.

## POINT PAPER

SUBJECT: Electronic Trip Flare (ETF)

OBJECTIVE: The ETF is a lightweight, manportable, easily emplaced and recoverable motion activated sensor system designed to provide early warning and illumination to individuals and small units.

## FACTS:

- The ETF Acquisition Strategy is to obtain 10,827 units through competitive acquisition using technology which is substantially, currently available. Production costs are projected at \$3.8M.
- A Cost Plus Incentive Fee type contract is envisioned, with contract award projected for 3QFY02 and a production run to begin 1QFY03.
- ETF will consist of six sub-systems:

- carrying/mounting case
  - module (motion sensor, lights, speaker and control unit)
  - battery module
  - power supply/charger module
  - remote control command transceiver
  - accessory carrying case

A complete ETF system will consist of one motion sensor, lights, speaker, control module with IR capability, two battery modules, one power supply, one remote control command transceiver, a carrying cases and an accessory case.

- The key ETF milestones are:

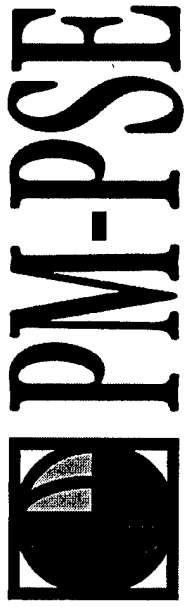
Draft RFP	3QFY00
Issue RFP	1QFY01
Contract Award	3QFY02

BRIEFER: Mr. Tom Endler, Production, Fielding and Sustainability Manager, Office of the Product Manager, Physical Security Equipment, Ft. Belvoir, VA.

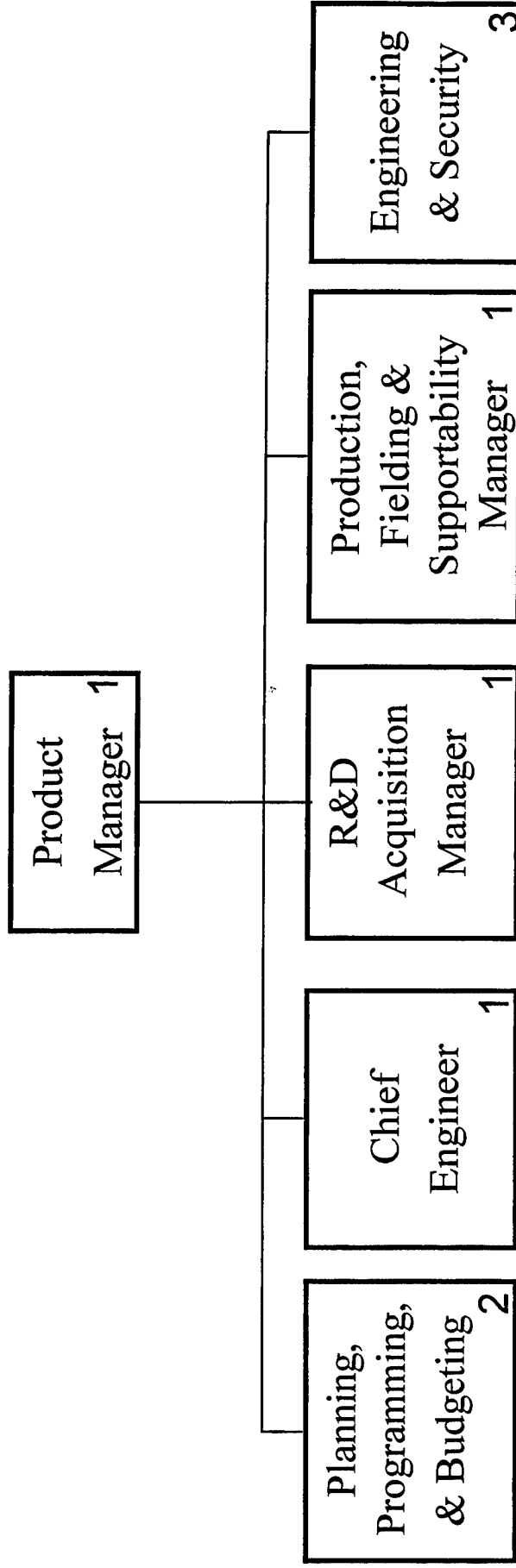


# Organizational Structure

---



Product Manager, Physical Security Equipment

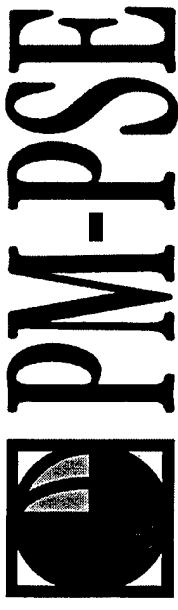






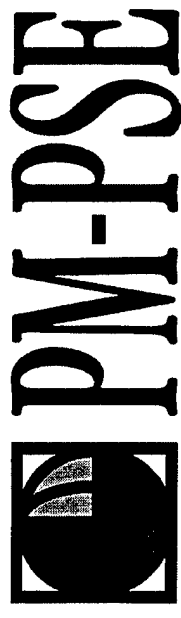
## **PM-PSE Mission**

---



**Product Manager, Physical Security Equipment**

**Provide cost-effective, state-of-the-art  
and logistically supportable physical  
security system to installations and  
forces deployed worldwide**



Product Manager, Physical Security Equipment

---

# Mobile Detection Assessment Response System - Interior (MDARS-I)

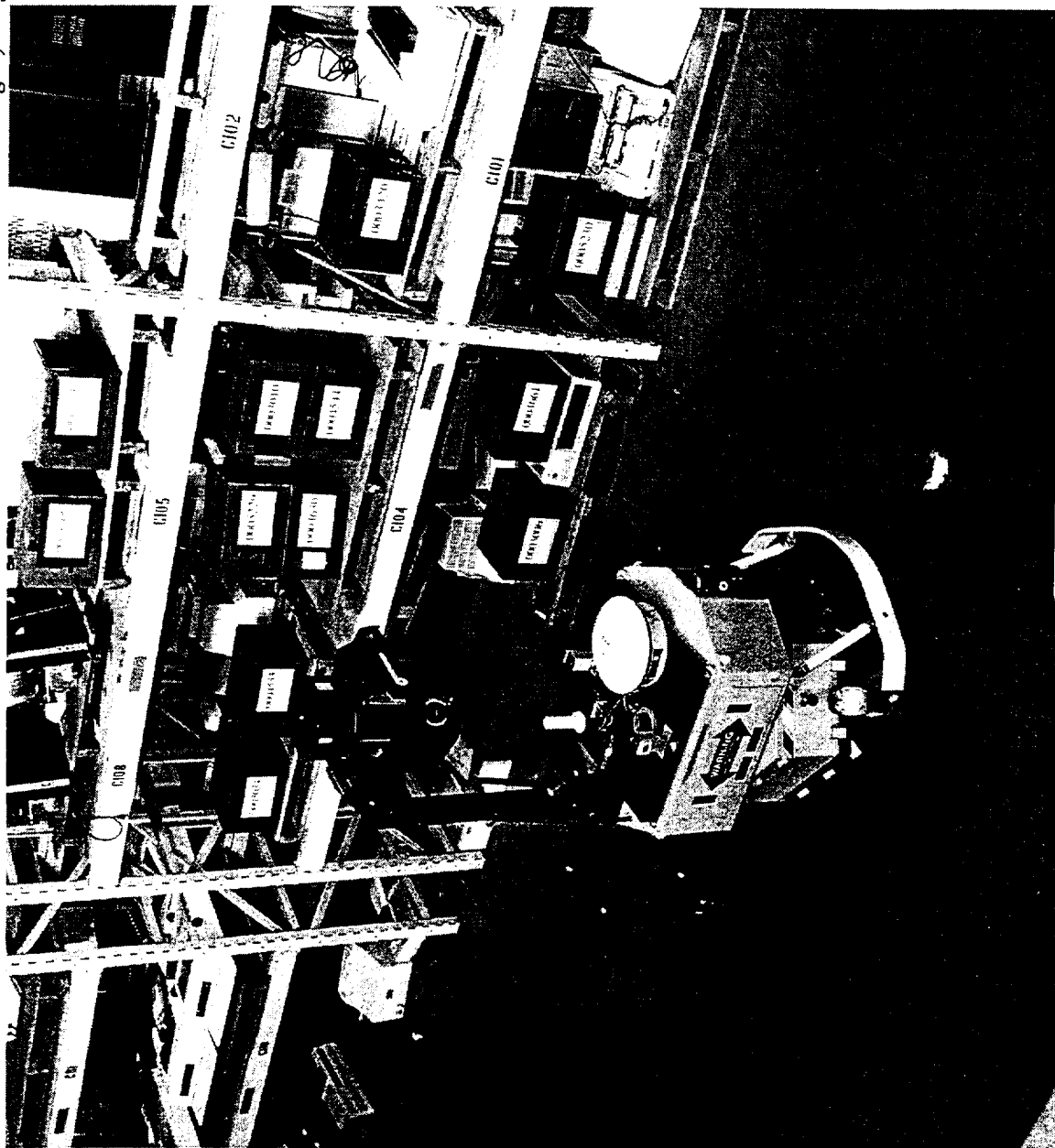




# MDARS-I System

# PM-PSE

Product Manager, Physical Security Equipment

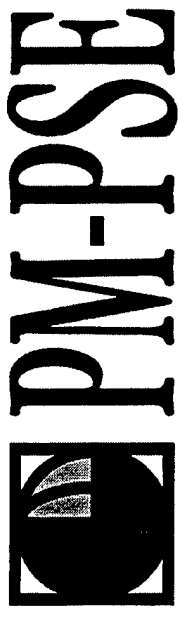




# MDARS-I

## Program/System

### Definition

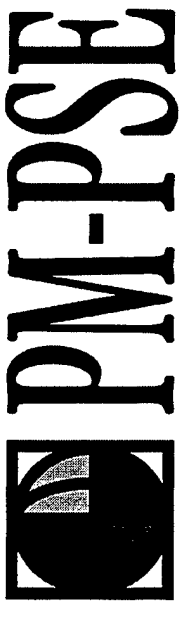


Product Manager, Physical Security Equipment

- Operates in warehouses, office buildings, hospitals and other enclosed structures
- Randomly navigates interior building interiors, while performing intrusion detection and inventory assessment
- Pre-Planned Product Improvements (P3I) will include Detection on the Move, Additional non-lethal response capabilities, Integration of Interior and Exterior platforms, and Integration with fixed IDS



# MDARS-I Program/System Status



Product Manager, Physical Security Equipment

- Successfully completed Technical Feasibility Test-II
- Completed Preparatory and Installation Phase of MDARS-I EUA
- Completed MDARS-I platform development and prototyping
- Developed EUA Evaluation Plan for the Product Assessment Subsystem
- Developed draft specification and draft RFP components for EMD/production contract



# MDARS-I

## Program/System

### Requirements

---



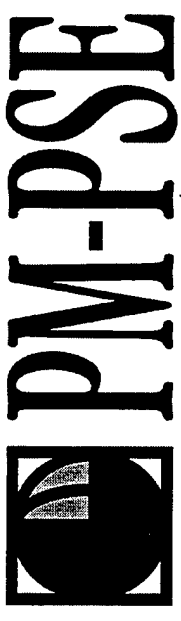
Product Manager, Physical Security Equipment

- Verify the status of barriers and products within a six meter line of sight range
- Provide cost-effective intruder detection and assessment by mobile platforms while in motion
- That the platforms will respond to a sensor in alarm and perform assessment without operator intervention
- Be designed to operate in an environment which contains both active sensors and other Phase II platforms
- Provide an annunciator which integrates existing IDS with platforms



# MDARS-I Contract Opportunity

---



Product Manager, Physical Security Equipment

**Title:** MDARS-I

**Objective:** Award an Engineering and Manufacturing  
Development (EMD) Contract

**Proposed Contract Type:** Cost Plus Incentive Fee (EMD) Firm  
Fixed Price (Production option of non-developmental items) Fixed  
Price Incentive - (Production option of developmental items)

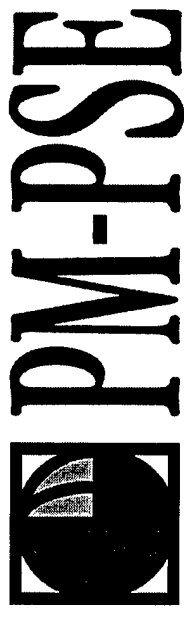
**Key Milestones:** RFP release, 4QFY98, contract award, 1QFY99

**Estimated Value:** \$24M

**POC:** LTC Bruce M. Swagler

Product Manager, Physical Security Equipment  
(703) 704-2416; DSN: 654-2416

**CPOC:** Mr. Richard Sturgis; (703) 325-6068; DSN 992-6068



Product Manager, Physical Security Equipment

---

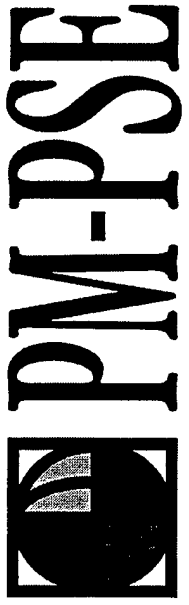
# Mobile Detection Assessment Response System - Exterior (MDARS-E)



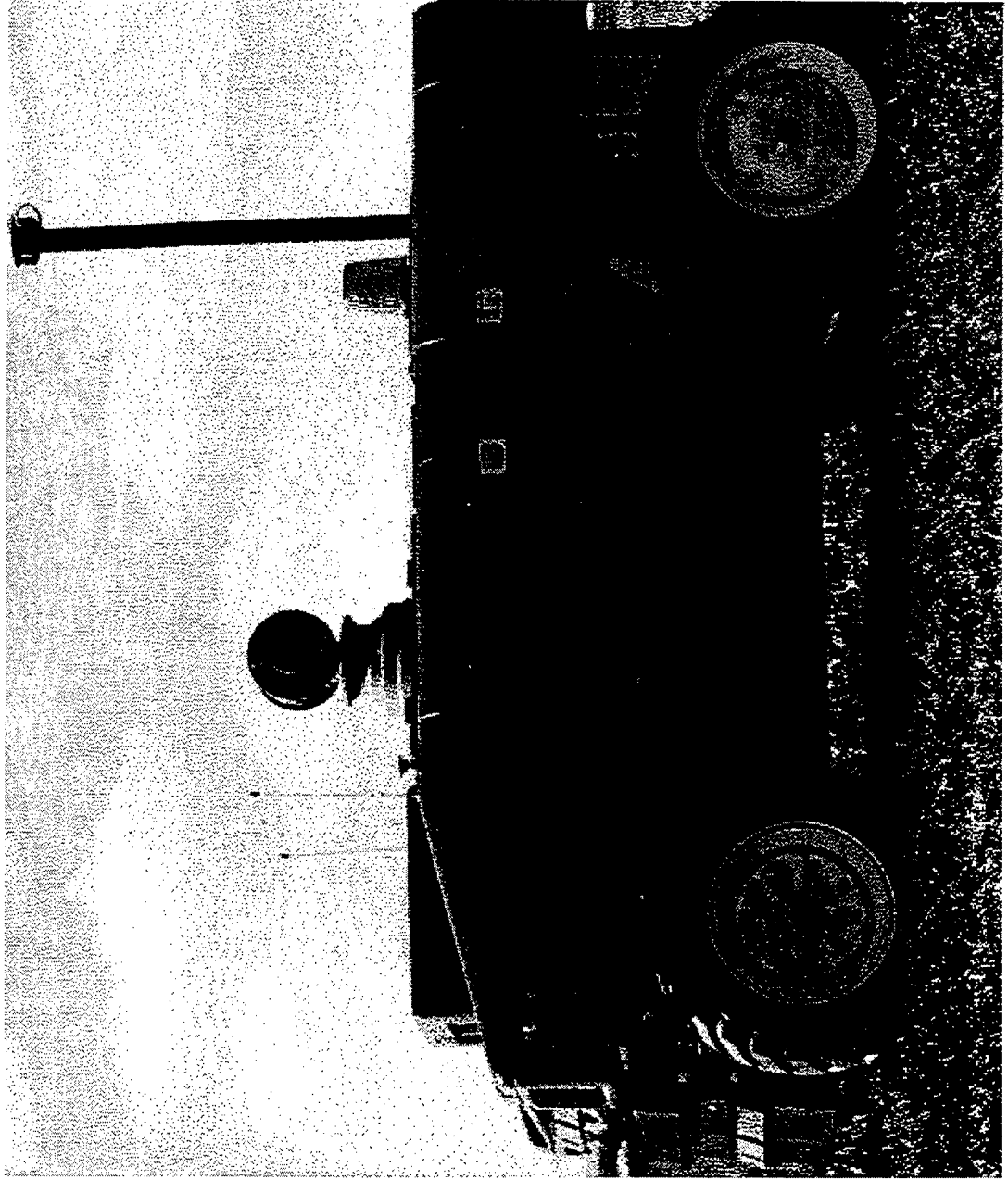




# MDARS-E System



Product Manager, Physical Security Equipment

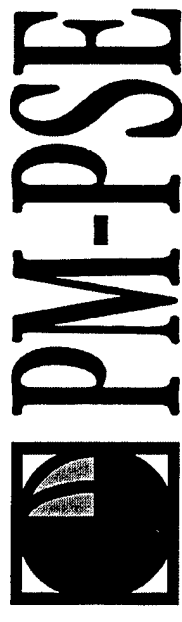




# MDARS-E

## Program/System

### Definition



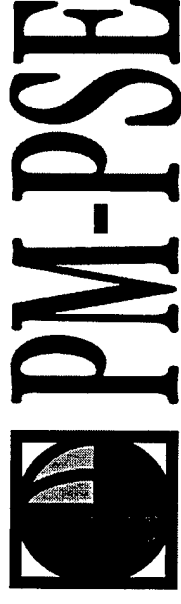
Product Manager, Physical Security Equipment

- Operates in general storage yards, arsenals, petroleum storage areas, airfields, rail yards and port facilities
- Randomly navigates exterior perimeters and roadways, while performing intrusion detection
- Pre-Planned Product Improvements (P3I) will include employing delay devices, integration of fixed exterior sensors into a single system



# MDARS-E Program/System

## Status



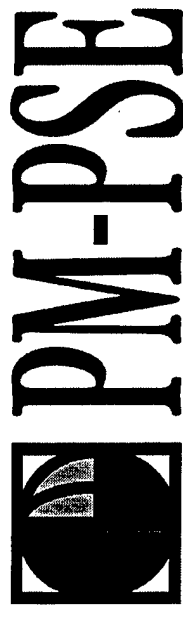
Product Manager, Physical Security Equipment

- Completed final design iteration of MDARS-E vehicle
- Successfully completed informal vehicle test at ATC Robotics Test Course
- Completed and prototyped first design iteration of Internal Locking Device (ILD)
- Completed initial design and integration of Vehicle Mission Payloads and Subsystems
- Conducted design review and demonstration of integrated Vehicle with Subsystems
- Integrated Sarnoff VFE-100 Collision Avoidance and IDS Subsystem into Vehicle



# MDARS-E System

## Requirements



Product Manager, Physical Security Equipment

- Operate and communicate at least 300 meters from a remote area control unit or signal relay device
- Verify the status of barriers and products within a six meter line-of-sight range
- Achieve a required minimum response speed of 15 KPH with a goal of 30 KPH
- Provide intruder detection and assessment by the mobile platform while on the move
- Provide an annunciator which integrates existing IDS with the platforms



## **MDARS-E Contract**

### **Opportunity**



Product Manager, Physical Security Equipment

**Title:** MDARS-E

**Objective:** Award an Engineering and Manufacturing  
Development (EMD) Contract

**Proposed Contract Type:** Cost Plus Incentive Fee

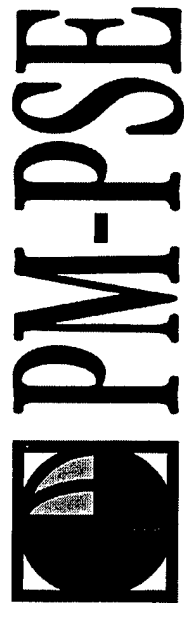
**Key Milestones:** MS I/II IPR, 3QFY99

**Estimated Value:** \$14 to \$30M

**POC:** LTC Bruce M. Swagler

Product Manager, Physical Security Equipment  
(703) 704-2416; DSN: 654-2416

**CPOC:** Mr. Richard Sturgis; (703) 325-6068; DSN 992-6068



Product Manager, Physical Security Equipment

---

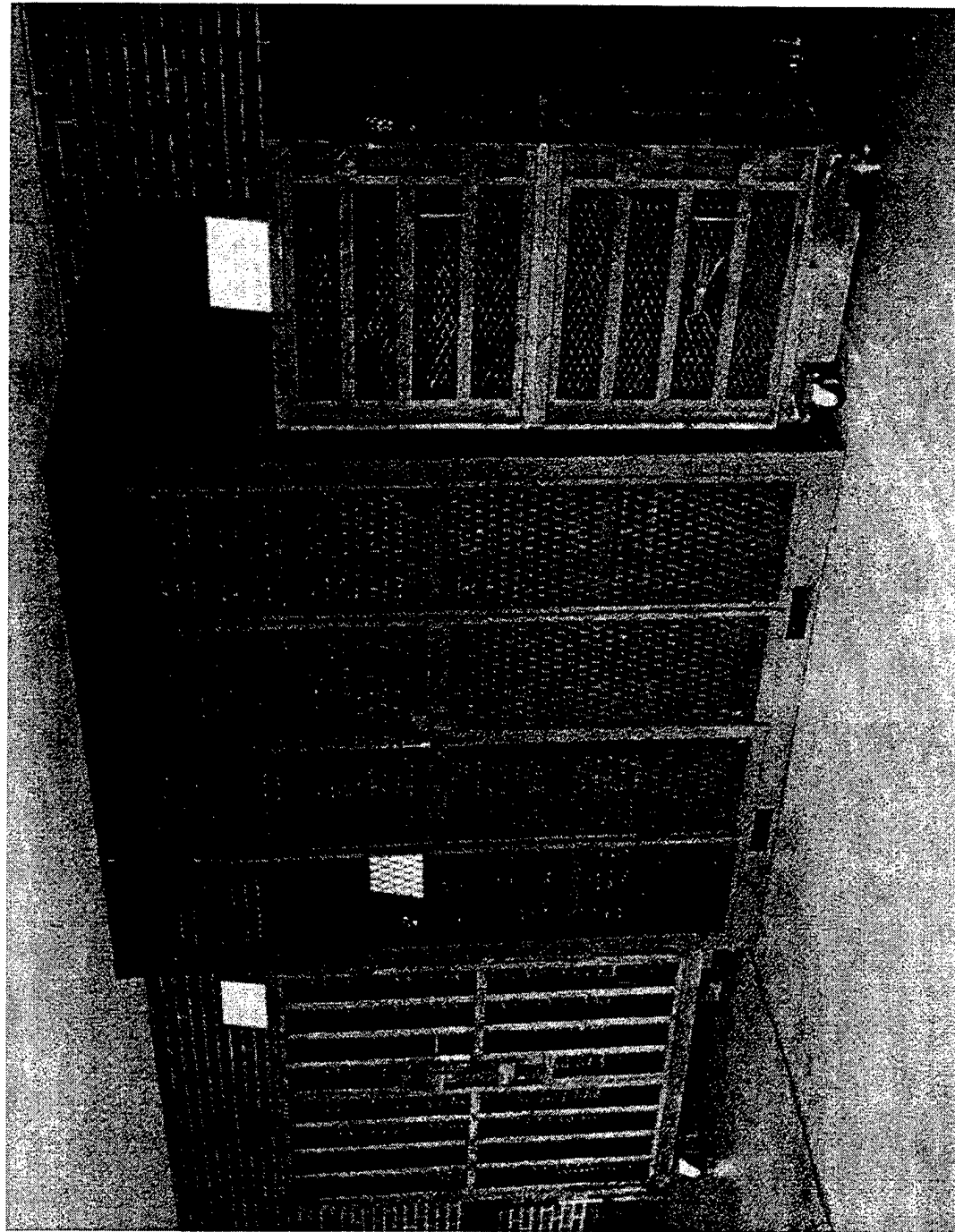
# High-Value Asset Security Container (HVASC) Phase I (Security Container)





Product Manager, Physical Security Equipment

# HVASC System

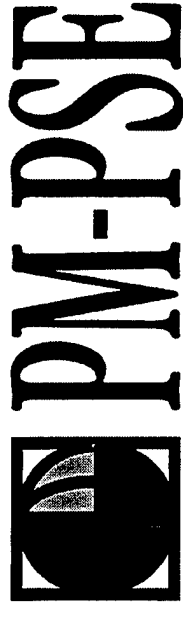




# HVASC

## Program/System Definition

---



Product Manager, Physical Security Equipment

- Provides commanders a container to secure high-value items in both garrison and field environments
- Increases readiness and sustainability by ensuring the unit maintains on-hand equipment accountability
- Protects highly pilferable, sensitive items such as Night Vision Devices (NVDs), global positioning devices, etc

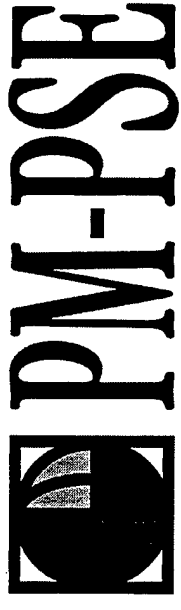




**HVASC**

**Program/System**

**Status**

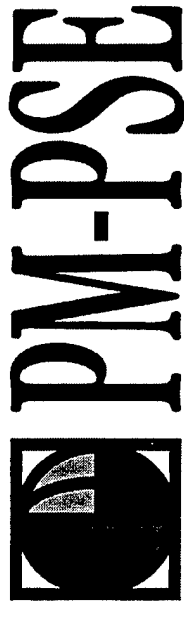


Product Manager, Physical Security Equipment

- Completed Early User Appraisal (EUA) at Army (Ft. Belvoir and Ft. Campbell), Navy (Naval Station Norfolk and Little Creek Naval Station), and Marine Units (Camp Allen, Norfolk)
- Completed Army directed procurement package
- Completed Safety Release Testing
- Completed Safety Assessment Report
- Finalized Limited Army Distribution List
- Finalized Technical Drawing Package



# HVASC System Requirements

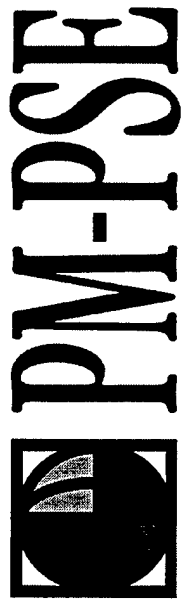


Product Manager, Physical Security Equipment

The specific production requirements  
are established in the HVASC  
Technical Drawing Package



# HVASC Contract Opportunity



Product Manager, Physical Security Equipment

**Title:** HVASC

**Objective:** Award a Production Contract

**Proposed Contract Type:** Firm Fixed Price/IDIQ

**Key Milestones:** Production Contract Award, 4Q98

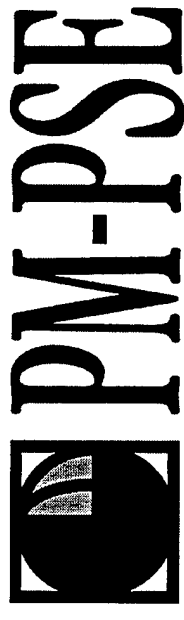
**Estimated Value:** \$100,00 to \$1M

**POC:** LTC Bruce M. Swagler

Product Manager, Physical Security Equipment

(703) 704-2416; DSN: 654-2416

**CPOC:** Ms. Margaret Proctor; (703) 325-2859; DSN 992-2859



Product Manager, Physical Security Equipment

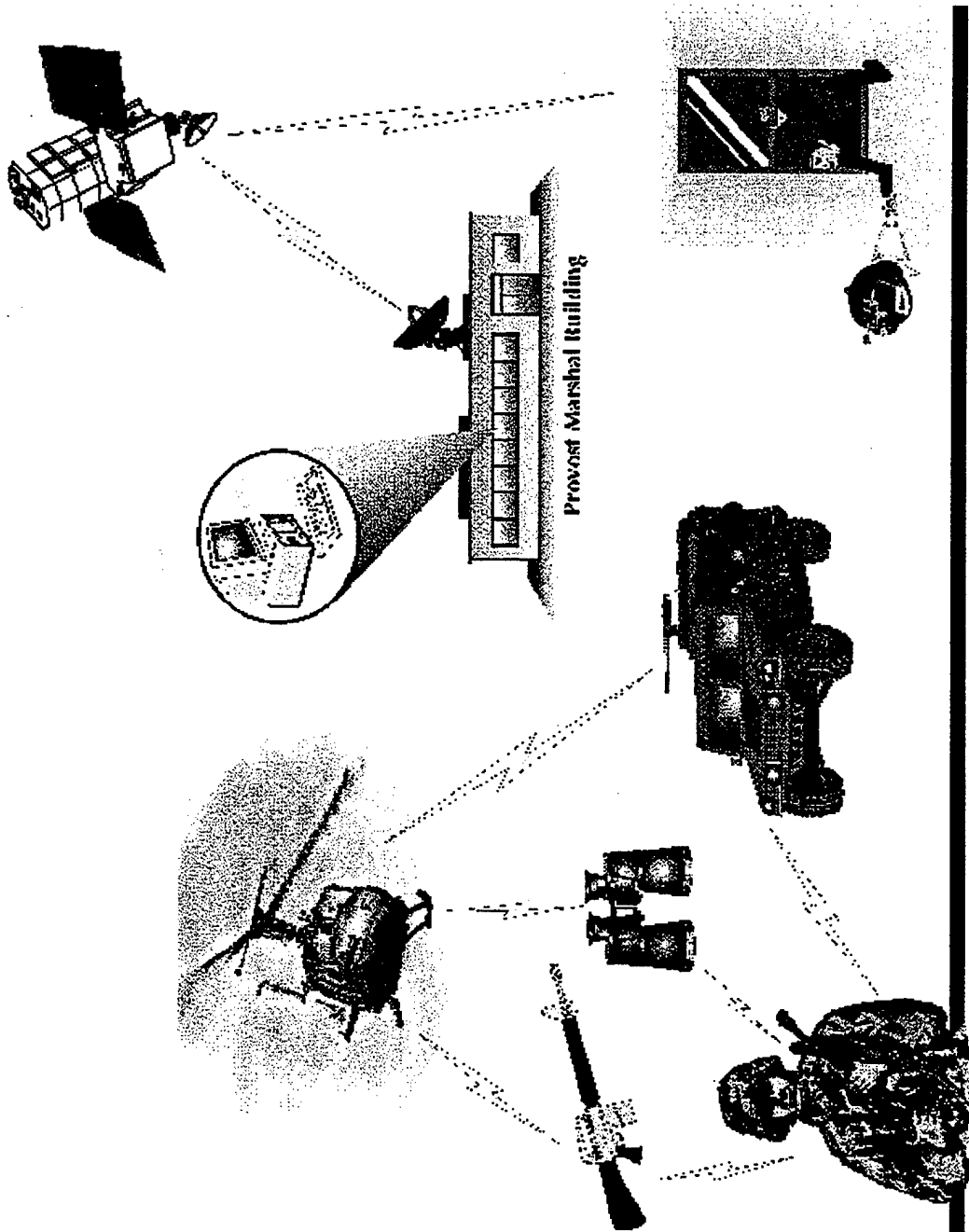
---

# High-Value Item Security System (HVISS) Phase II (Radio Frequency Identification)



Product Manager, Physical Security Equipment

# HVISS System

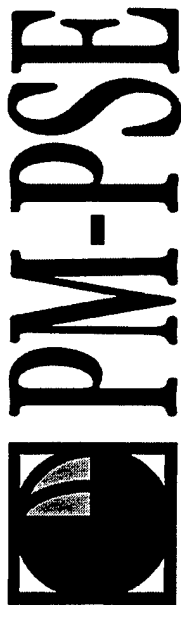




## HVISS

### Program/System Definition

---



Product Manager, Physical Security Equipment

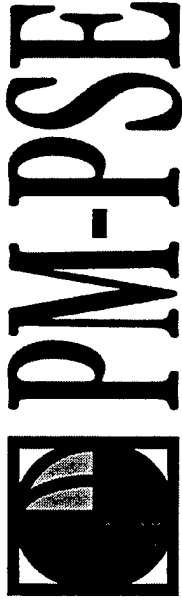
- Provides commanders a system to locate and recover high value items in both garrison and field environments
- Increases readiness and sustainability by ensuring the unit maintains on-hand equipment
- Provides accountability of highly pilferable, sensitive items such as night vision devices (NVDs) and global positioning devices, etc



# HVISS

## Program/System

### Status



Product Manager, Physical Security Equipment

- Completed initial staffing of Operational Requirements Document (ORD)
- Completed Trade-Off Analysis
- Initiated miniaturized Radio Frequency Identification (RFID) Tagging/Tracking Applied Research effort



# HVISS System Requirements



Product Manager, Physical Security Equipment

**System** - accountability portion shall detect all tags within an area of at least 256 square meters in five minutes and the locate recovery portion shall detect a specified tags using one unit traveling at 24 kilometers per hour within an area of 22 square kilometers in four hours

**Tag** - must have unique factory-programmed unalterable identification code and be small enough to be attached to items without interfering with its intended use

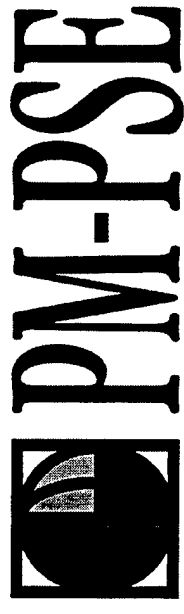
**Interrogator** - threshold weight of four kilograms or less, compatible with Electronic Industries Alliance (EIA)-232C standards, operate for four hours or more by battery and provide visual displays





# HVISS Contract

## Opportunity



Product Manager, Physical Security Equipment

**Title:** HVISS

**Objective:** Award an EMD Contract

**Proposed Contract Type:** Cost Plus Incentive Fee

**Key Milestones:** Prepare RFID Board Agency Announcement  
Continue Miniaturized RF Tagging/Tracking  
Applied Research Effort Complete Best  
Technical Approach and COEA

**Estimated Value:** \$2-\$10M

**POC:** LTC Bruce M. Swagler

Product Manager, Physical Security Equipment  
(703) 704-2416

DSN: 654-2416

**CPOC:** Ms. Margaret Proctor; (703) 325-2859; DSN 992-2859



Product Manager, Physical Security Equipment

# Platoon Early Warning Device-II (PEWD-II)

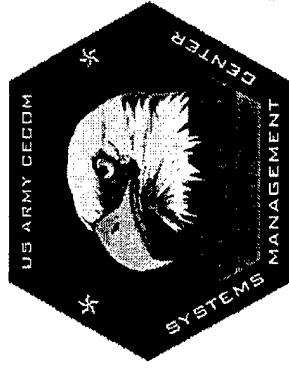


**PM-PSE**

Product Manager, Physical Security Equipment

## PEWD-II System

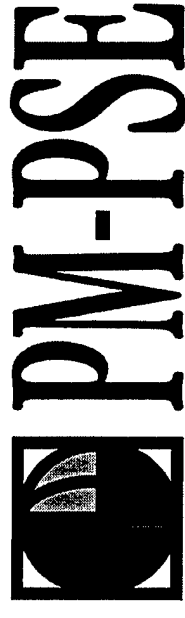




# PEWD-II

## Program/System

### Definition



Product Manager, Physical Security Equipment

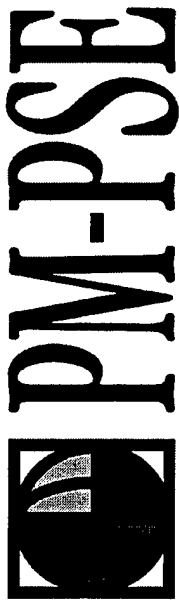
- Provides a replacement Tactical Sensor System for the Platoon Early Warning System (PEWS)
- Enhances soldier survivability during defensive and ambush type operations
- Provides early detection of an enemy threat, this capability will enhance time available to determine the appropriate tactical response
- Organic to tactical units and available under Common Table and Allowances (CTA)



# PEWD-II

## Program/System

### Status



Product Manager, Physical Security Equipment

- U.S. Army Infantry Center (USAIC) designated the Combat Developer
- Completed Operational Requirements Documents (ORD)
- Initiated market investigation to identify Non Developmental Item (NDI) (level A)/Commercial Off the Shelf (COTS) systems candidates
- Conducted initial technical testing on four potential candidate NDI(A)/COTS systems



# PEWD-II System

## Requirements



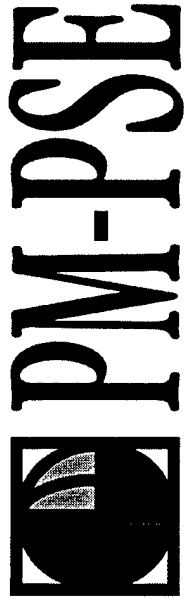
Product Manager, Physical Security Equipment

- Includes a hand-held monitor, a minimum of seven sensors with transmitters, and carrying case not to exceed seven kilograms (approximately 15.5 pounds)
- Rugged enough to withstand the rigorous handling and stress encountered during combat operations. Performance of the PEWD-II must not be affected by airdrop in an airborne Soldier's rucksack or from vibrations of transportation in combat vehicles
- Be of such low cost and simple design and construction that a sensor which becomes defective can be considered a throw-away item (desired)
- Operable in an NBC contaminated environment by personnel in MOPP4, and be decontaminable



## **PEWD-II Contract**

### **Opportunity**



**Product Manager, Physical Security Equipment**

**Title: PEWD-II**

**Objective: Award an EMD Contract**

**Proposed Contract Type: Cost Plus Incentive Fee**

**Key Milestones: RFP Release 4QFY99  
Contract Award 4QFY99**

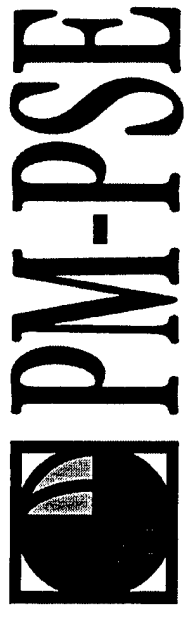
**Estimated Value: \$40M**

**POC: LTC Bruce M. Swagler**

**Product Manager, Physical Security Equipment  
(703) 704-2416**

**DSN: 654-2416**

**CPOC: Mr. Steve Timchak; (703) 325-1719; DSN 992-1719**



Product Manager, Physical Security Equipment

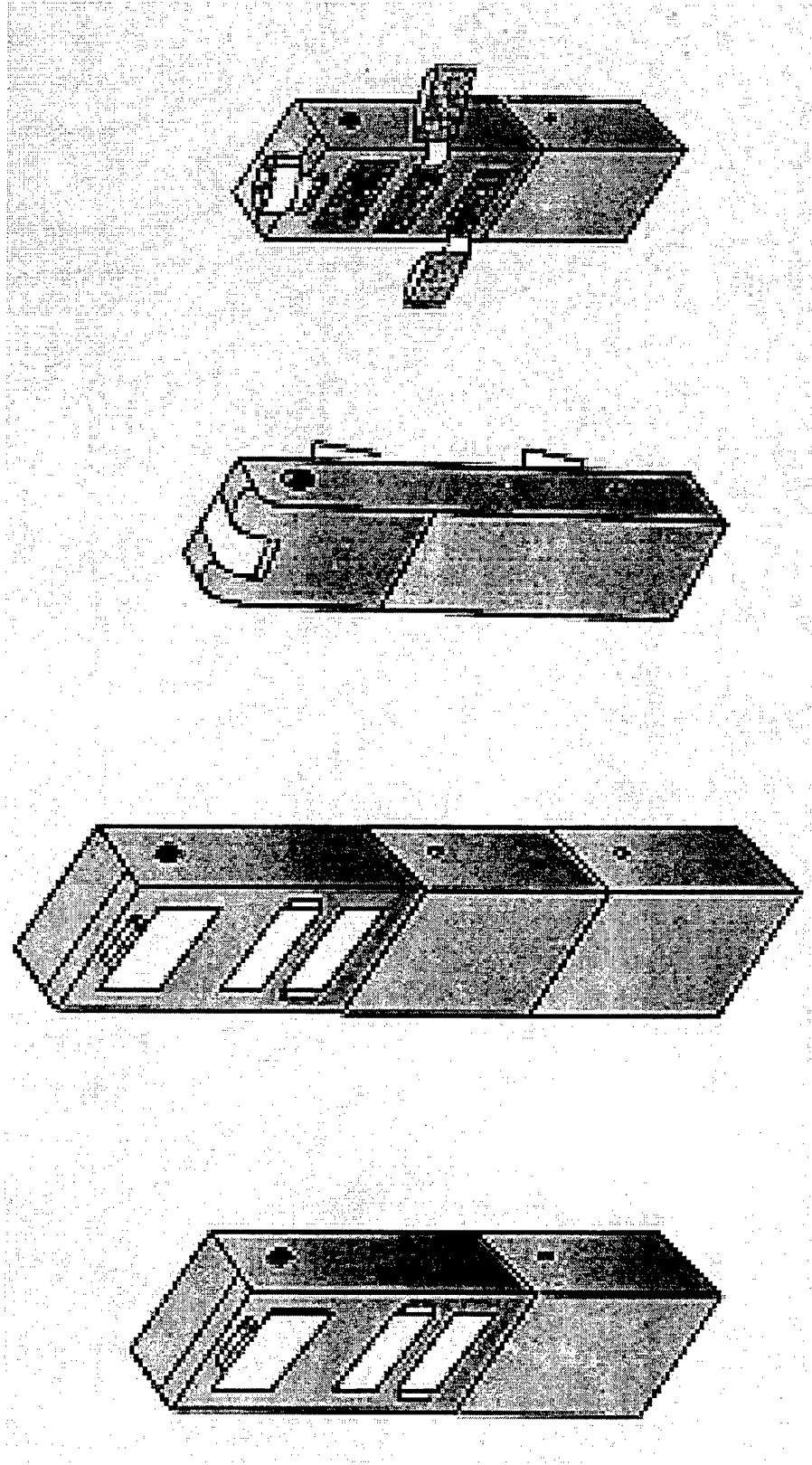
# Electronic Trip Flare (ETF)





Product Manager, Physical Security Equipment

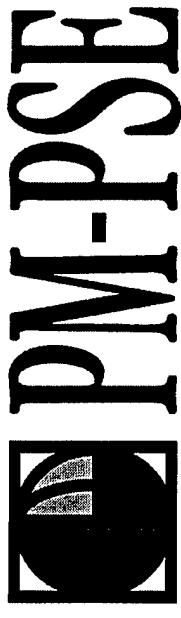
## ETF System





## ETF Program/System Definition

---



Product Manager, Physical Security Equipment

- Provides lightweight, manportable, easily emplaced and recoverable motion activated device designed to provide early warning and illumination to individuals and small units
- Provides commanders with an increase in time to effectively determine the most appropriate tactical response
- Used as an independent/individually employed early warning device or as a part of a security concept layer



## ETF System Requirements



Product Manager, Physical Security Equipment

- Module case shall be constructed of a high impact case that will keep the system waterproofed to one atmosphere and objective to two atmospheres
- Battery module(s) shall have sufficient power for 5 day (120 hour) operation of motion sensor, and a minimum of 100 60-second light and audible (horn) activations



# ETF Contract Opportunity



Product Manager, Physical Security Equipment

**Title:** ETF

**Objective:** Award an EMD Contract

**Proposed Contract Type:** Cost Plus Incentive Fee

**Key Milestones:** RFP Release 1QFY01  
Contract Award 3QFY02

**Estimated Value:** \$4.5M

**POC:** LTC Bruce M. Swagler  
Product Manager, Physical Security Equipment  
(703) 704-2416  
DSN: 654-2416

**CPOC:** Mr. Steve Timchak; (703) 325-1719; DSN 992-1719



# NOTES



# Global Positioning System



**Major Mike Biega**  
**Deputy Program Manager - Army**

**Product Manager, Global Positioning System**  
**(GPS)**

**NAVSTAR GPS Joint Program Office**

**UNCLASSIFIED**

POINT PAPER

SUBJECT: Defense Advanced GPS Receiver (DAGR)

OBJECTIVE: Provide information for attendees at the CECOM APBI on the DAGR acquisition that is managed by the NAVSTAR GPS Joint Program Office (JPO), Los Angeles Air Force Base, CA.

FACTS:

- The DAGR is a self-contained secure GPS receiver designed for handheld and integrated use. It replaces the handheld Precision Lightweight GPS receiver (PLGR).
- The DAGR will upgrade capabilities currently available in the PLGR. Some upgrade features include the Selective Availability Anti-Spoofing Module (SAASM), enhanced anti-jam technology, and the latest in commercial GPS technology.
- The key milestones for the DAGR acquisition are:
  - Draft RFP: Dec 98
  - Final RFP: Jun 99
  - Award: Nov 99
  - Army Buy: Oct 00
- PM GPS is estimating a DAGR requirement of approximately 190,000. The Joint requirement is estimated to be approximately 320,000. The estimated unit cost of a DAGR ranges from \$1500 to \$2300. The estimated total Army cost ranges from \$300 to \$500 Million and the estimated Joint cost ranges from \$300 to \$750 Million.
- This will be a Firm-Fixed-Price, Indefinite Delivery/Indefinite Quantity procurement. It will be a Best Value evaluation with one award. The contract is planned to run five years with two option years.

BRIEFER: Major Mike Biega, Deputy Project Manager-Army, representing the Product Manager GPS at the NAVSTAR GPS JPO.

## POINT PAPER

SUBJECT: GPS Receiver Applications Module (GRAM)

OBJECTIVE: Provide information for attendees at the CECOM APBI on the GRAM acquisition that is managed by the NAVSTAR GPS Joint Program Office (JPO), Los Angeles Air Force Base, CA.

## FACTS:

- The GRAM is "GPS on a card". It places the full functionality of a secure GPS receiver on a standard-bus card. The GRAM allows the GPS customer to embed a standard, approved GPS module into a host application system, thus saving space and weight.
- The GRAM will include the latest in commercial GPS technology as well as the Selective Availability Anti-Spoofing Module (SAASM) and enhanced anti-jam technology. The GRAM will come in standard form factors and be designed with an open systems, plug and play approach to systems integration.
- The key milestones for the GRAM acquisition are:
  - Draft RFP: Dec 98
  - Final RFP: Jun 99
  - Award: Nov 99
  - Army Buy: Oct 00
- PM GPS is estimating a GRAM requirement of approximately 480,000. The estimated unit cost of a GRAM ranges from \$1000 to \$3000. The estimated total Army cost ranges from \$480 Million to \$1.4 Billion.
- This will be a Firm-Fixed-Price, Indefinite Delivery/Indefinite Quantity procurement. It will be a Best Value evaluation with one award. The contract is planned to run five years with two option years.

BRIEFER: Major Mike Biega, Deputy Project Manager-Army, representing the Product Manager GPS at the NAVSTAR GPS JPO.



## POINT PAPER

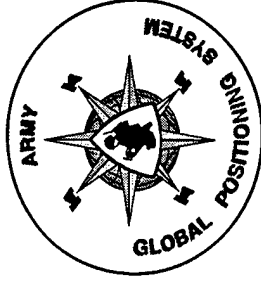
SUBJECT: GPS/Inertial Navigation System (GPS/INS)

OBJECTIVE: Provide information for attendees at the CECOM APBI on the GPS/INS acquisition that is managed by the NAVSTAR GPS Joint Program Office (JPO), Los Angeles Air Force Base, CA.

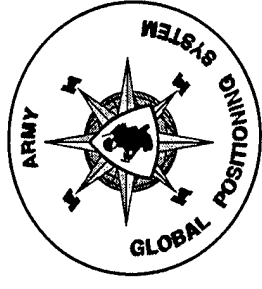
## FACTS:

- The GPS/INS incorporates a tightly coupled miniature secure GPS receiver and a miniature inertial measurement unit. It furnishes the user with a low cost navigation solution that provides the accuracy of GPS and the dependability of an INS.
- The GPS/INS will incorporate the Selective Availability Anti-Spoofing Module (SAASM), provide enhanced anti-jam technology, and meet emerging standards for the GPS Receiver Applications Module (GRAM) as part of the GPS package. It will employ independent navigation modes to include inertial-only, GPS-only and integrated GPS/INS. The GPS/INS acquisition is based on the DARPA-sponsored development project, the GPS Guidance Package.
- The key milestones for the GPS/INS acquisition are:
  - Draft RFP: Dec 98
  - Final RFP: Jun 99
  - Award: Nov 99
  - Army Buy: Oct 00
- PM GPS is estimating a GPS/INS requirement of approximately 80,000. The estimated unit cost of a GPS/INS ranges from \$5000 to \$15,000. The estimated total Army cost ranges from \$400 Million to \$1.2 Billion.
- This will be a Firm-Fixed-Price, Indefinite Delivery/Indefinite Quantity procurement. It will be a Best Value evaluation with one award. The contract is planned to run five years with two option years.

BRIEFER: Major Mike Biega, Deputy Project Manager-Army, representing the Product Manager GPS at the NAVSTAR GPS JPO.



# Defense Advanced GPS Receiver (DAGR)

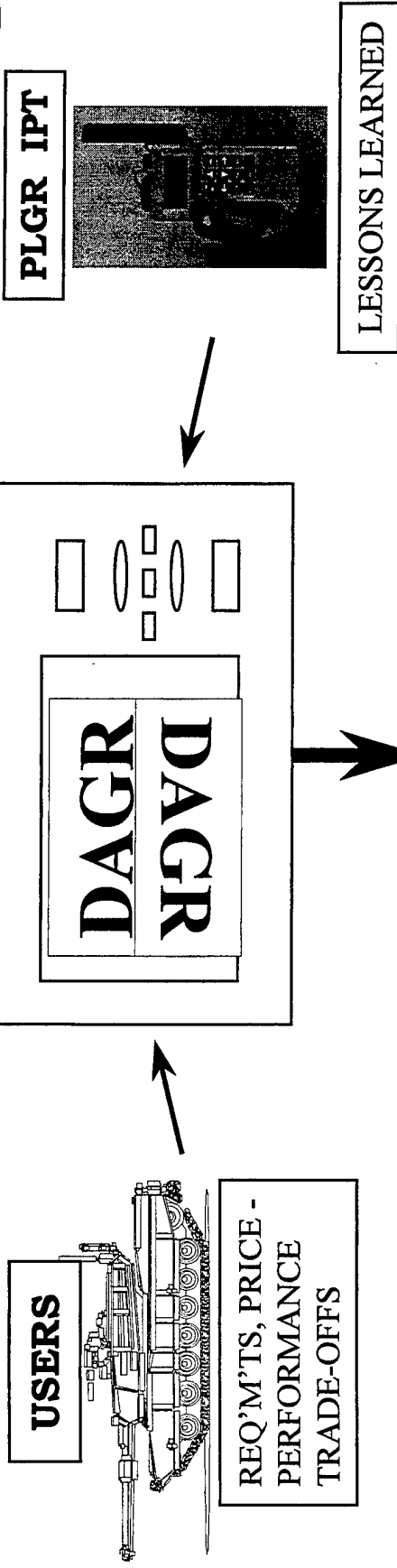
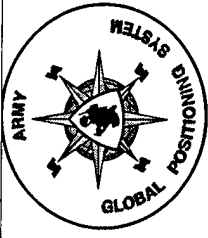


# DAGR Definition

**The DAGR is a self-contained secure GPS receiver designed for handheld and integrated use. The DAGR replaces the Precision Lightweight GPS Receiver (PLGR).**



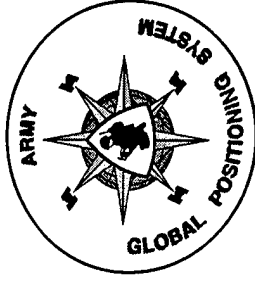
# DAGR Requirements



- Selective Availability Anti-Spoofing Module (SAASM)
- One Handed Operation (ease of use)
- Graphical User Interface
- Smaller and Lighter
- Mass Customization (diverse user base)
- Improved Anti-Jam
- All-In-View
- Dual Frequency
- Backward Compatibility



# Some Projected DAGR Applications



## Application

## Estimated Quantity

Handheld

75,000

M113/M60 Family of Vehicles

3,400

HMMWV

1,800

Patriot

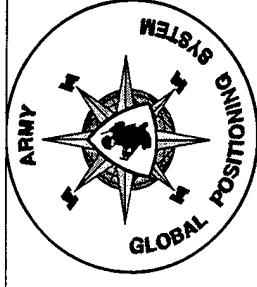
674

Breacher (Grizzly)

418

Total DAGRs

190,000/320,000



# Contract Opportunity

**TITLE:** Defense Advanced GPS Receiver (DAGR)

**OBJECTIVE:** Meet All Army GPS Handheld and Dismounted Applications

**PROPOSED CONTRACT TYPE:** FFP/IDIQ/Best Value

<b>KEY MILESTONES:</b>	<b>Draft RFP:</b>	<b>Dec 98</b>
	<b>Final RFP:</b>	<b>Jun 99</b>
	<b>Award:</b>	<b>Nov 99</b>
	<b>Army Buy:</b>	<b>Oct 00</b>

**ESTIMATED VALUE:** Unit: \$1,500 - \$2,300

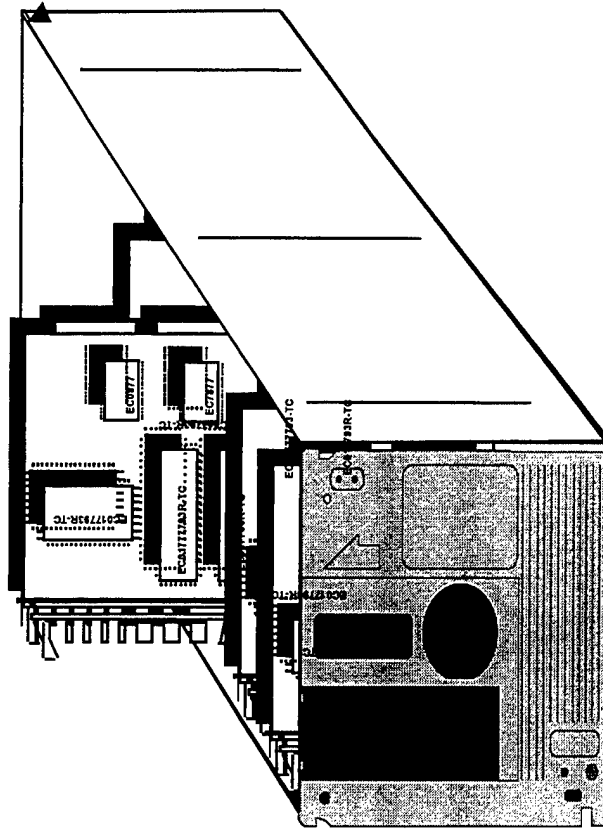
**Total:** \$300 Million - \$750 Million

**TECH POC/TEL #:** MAJ Mike Biega/(310) 363-2925

**CONTRACT POC/TEL #:** Lisa Vanderpoorten/(310) 363-6360



# GPS Receiver Applications Module (GRAM)





# GRAM Definition

**The GRAM is “GPS on a card.” The GRAM places the full functionality of a secure GPS receiver on a standard-bus card. It allows the GPS customer to embed a standard, approved GPS module into a host application system, thus saving space and weight.**





# GRAM Requirements



- ◆ Incorporates SAASM
  - GRAM/SAASM Contract
- ◆ Comes in Standard Form Factors
  - Standard Electronic Module Enhanced (SEM-E)
  - Versa Module Europe (VME)
  - PCMCIA
- ◆ Designed for Plug and Play
  - GRAM Guidelines
  - Interface Control Documents, Especially ICD-GPS-155\*

**\* GPS User Equipment Interface Control for GPS Receiver Applications Modules (GRAM) Bi-Directional Data Port**



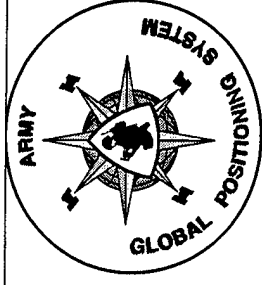
# Some Projected GRAM Applications



<u>Application</u>	<u>Estimated Quantity</u>	<u>Form Factor</u>
Land Warrior	88,000	PCMCIA
Movement Tracking System	55,000	PCMCIA
Apache (AH-64D)	1,500	SEM-E
M1A2 Abrams (SEP)	1,000	VME
XM982/Low Cost Competent Munitions	246,000	?
Total GRAMs		480,000



# Contract Opportunity



**TITLE:** GPS Receiver Applications Module (GRAM)

**OBJECTIVE:** Meet All Army GPS Embedded Applications

**PROPOSED CONTRACT TYPE:** FFP/IDIQ/Best Value

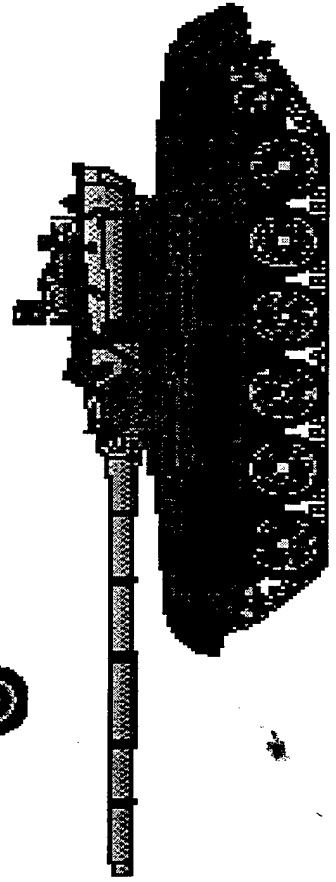
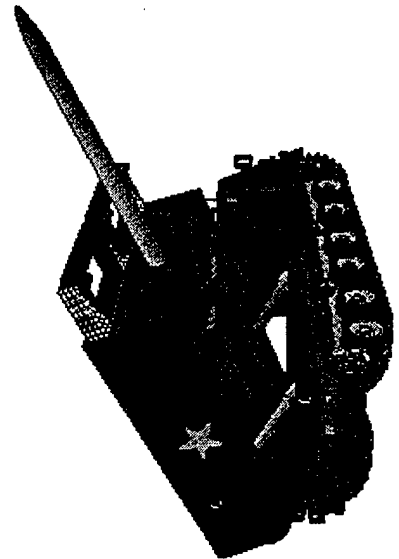
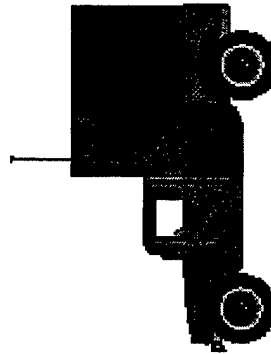
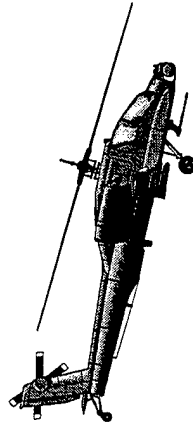
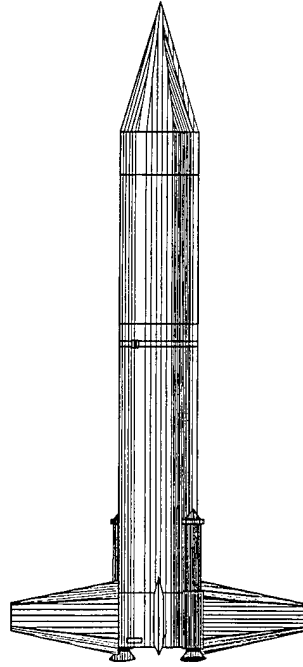
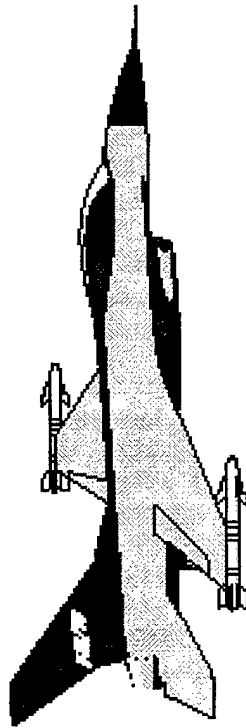
<b>KEY MILESTONES:</b>	<b>Draft RFP:</b>	<b>Dec 98</b>
	<b>Final RFP:</b>	<b>Jun 99</b>
	<b>Award:</b>	<b>Nov 99</b>
	<b>Army Buy:</b>	<b>Oct 00</b>

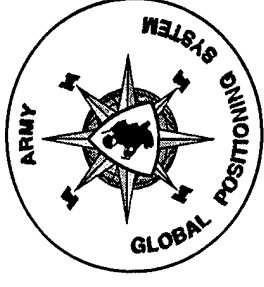
**ESTIMATED VALUE:** Unit: \$1,000 - \$3,000  
Total: \$480 Million - \$1.4 Billion

**TECH POC/TEL #:** MAJ Mike Biega/(310) 363-2925  
**CONTRACT POC/TEL#:** Lisa Vanderpoorten/(310) 363-6360



# GPS/Inertial Navigation System (GPS/INS)



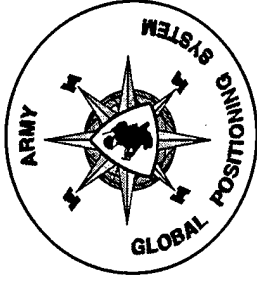


# GPS/INS Definition

**The GPS/INS incorporates a tightly coupled miniature secure GPS receiver and a miniature inertial measurement unit. It furnishes the user with a low cost navigation solution that provides the accuracy of GPS and the dependability of an INS.**



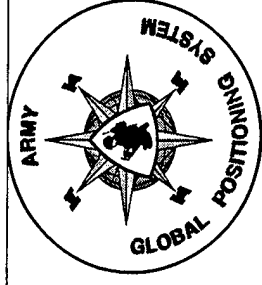
# GPS/INS Requirements



- ◆ Incorporates SAASM
- ◆ Meets GRAM Specifications
- ◆ Employs Independent Navigation Modes
  - Inertial Only
  - GPS Only
  - Integrated GPS/INS
- ◆ Based on DARPA-Sponsored GPS Guidance Package



# Contract Opportunity



**TITLE:** GPS/Inertial Navigation System (GPS/INS)

**OBJECTIVE:** Meet the Navigation Requirements for Mission Critical Systems that Require the Accuracy of GPS Complimented with the Dependability of an INS

**PROPOSED CONTRACT TYPE:** FFP/IDIQ/Best Value

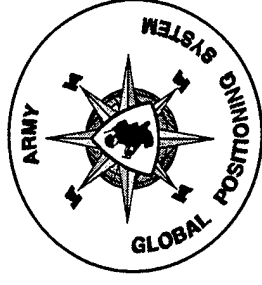
<b>KEY MILESTONES:</b>	<b>Draft RFP:</b>	<b>Dec 98</b>
	<b>Final RFP:</b>	<b>Jun 99</b>
	<b>Award:</b>	<b>Nov 99</b>
	<b>Army Buy:</b>	<b>Oct 00</b>

**ESTIMATED VALUE:** Unit: \$5,000 - \$15,000  
Total: \$400 Million - \$1.2 Billion

**TECH POC/TEL #:** MAJ Mike Biega/ (310) 363-2925  
**CONTRACT POC/TEL #:** Lisa Vanderpoorten/(310) 363-6360



# Some Projected GPS/INS Applications



## Application

## Estimated Quantity

Guided MLRS

75,000

ATACMS Blk IIA

600

Crusader Advanced FA System

700

Bradley FVS Upgrade

?

Comanche (RAH-66)

2,600

**Total GPS/INS**

**80,000**





# Challenges



1. **Navigation Warfare (NAVWAR) Upgrades (Anti-Jam/Anti-Spoof)**
2. **GPS Modernization Upgrades (New Signal Structure/Pseudolites)**
3. **Horizontal Technology Integration Program**
4. **Integration of 170 Army Platforms**
5. **Memorandum of Agreement with Each System**
6. **Funding**



# NOTES



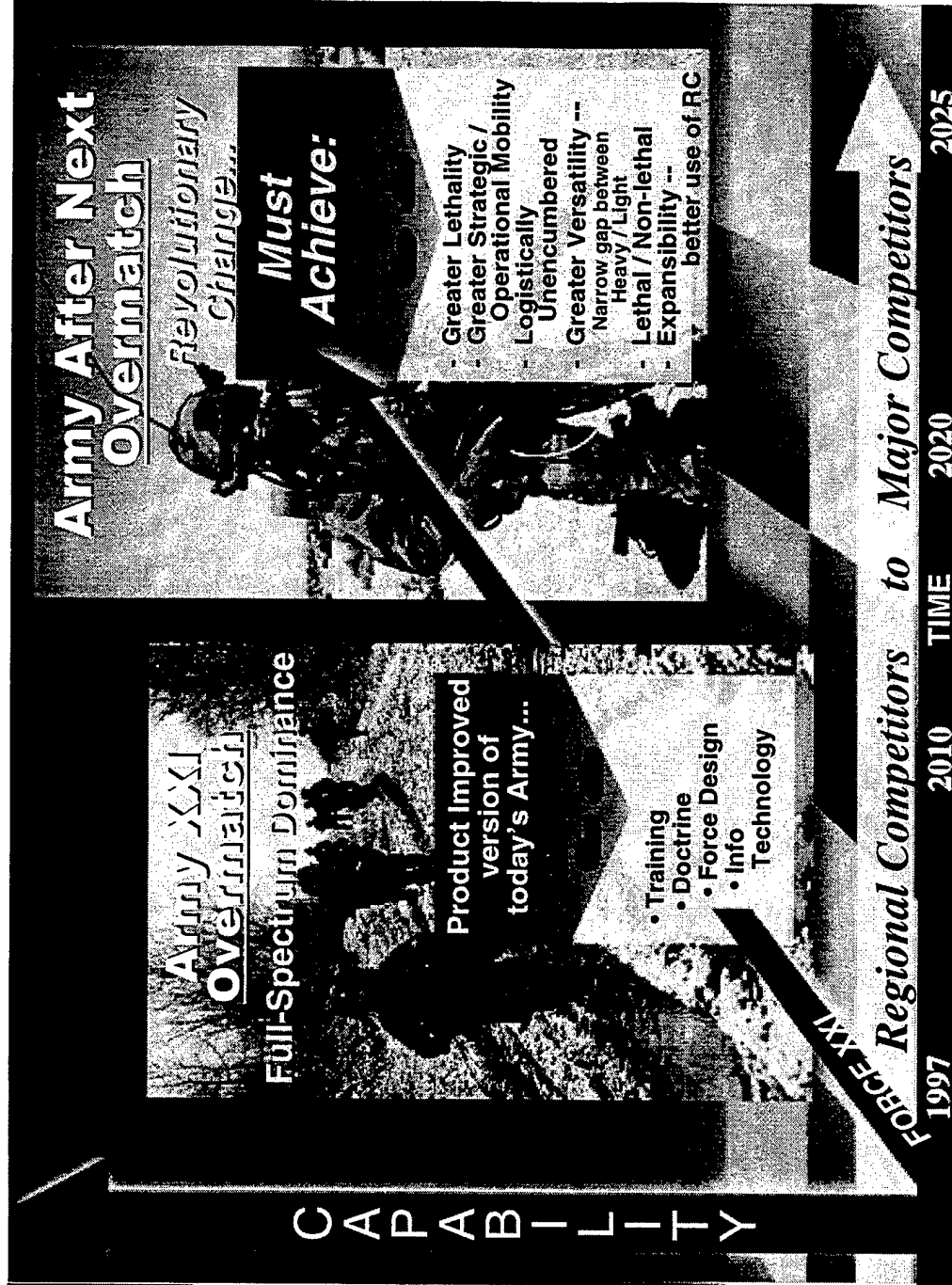
# SESSION V



# Program Executive Office Intelligence, Electronic Warfare & Sensors

Army initiatives  
enable a process of  
strategic change

*Fielding  
&  
Sustaining  
Force XXI  
while focusing  
on the  
Army After  
Next*



O&S Costs Briefing to Industry

Mr. Edward T. Bair - DPEO IEW&S

Unclassified

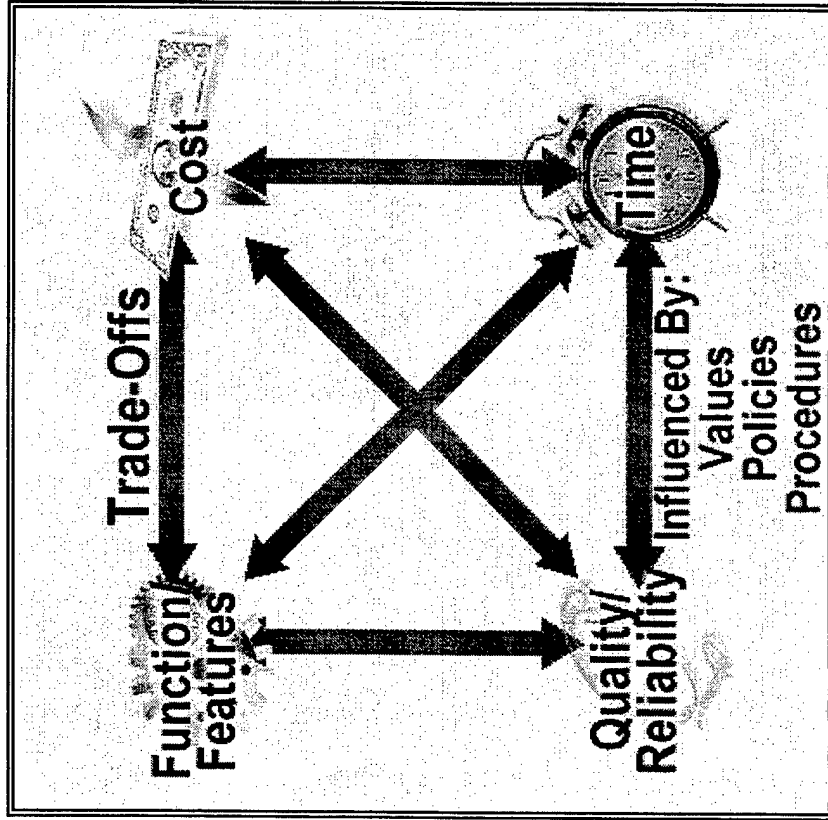
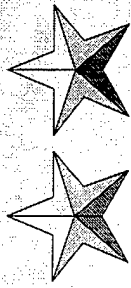


# DA \$'S

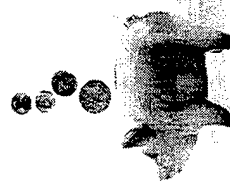
- # Avoid Death Spiral - Reduce Ownership Costs



# PEO IEW&S Intent



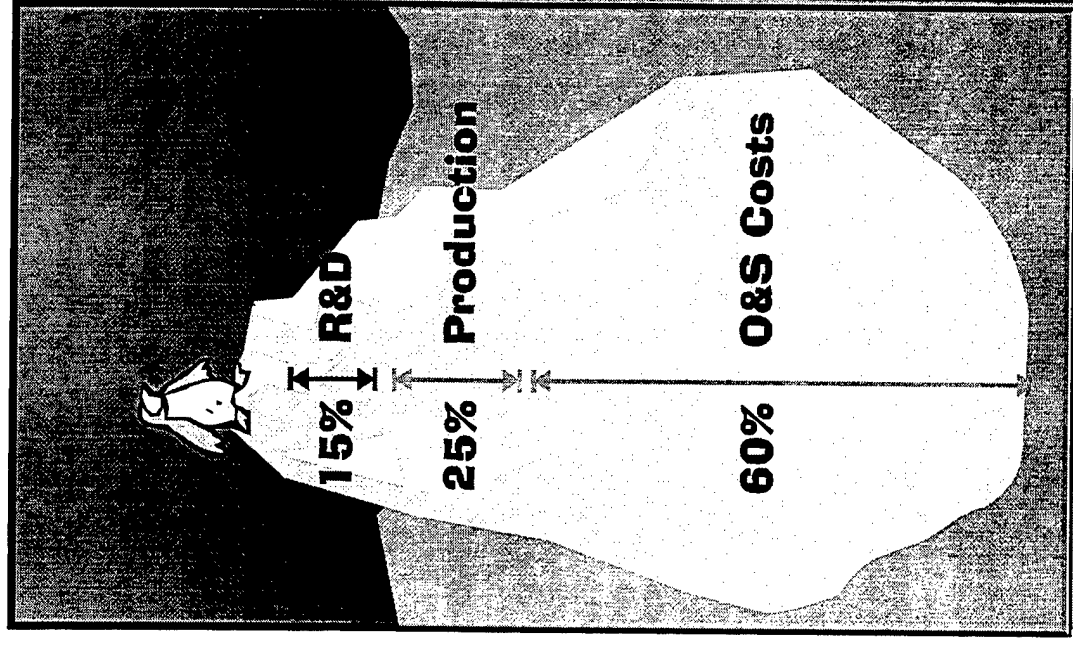
*Our Challenge is to  
Apply Business  
Thinking and  
Parametric Tools,  
Reduce the Overall Cost  
of Ownership, and to Be  
Able to Articulate the  
“Whole” Story*



***It's All About Affordability...***

# Cost of Ownership

- O&S Cost Reductions are Clearly an Area Where Savings can be Achieved to Fund Force Modernization
  - 60% or More of Life Cycle Costs (LCC) are in O&S
  - Yet 90% are Driven by Early R&D Design Decisions
  - As Systems Age, O&S Costs Increase Dramatically
- PM is Responsible for Total LCC Fielded Systems
  - If a Ford Can Do the Job, Why Buy a Cadillac?
  - New & Legacy Systems
  - Need to Identify Cost Drivers and Evaluate for Design Alternatives
  - Form IPT to Identify and Work Solutions
- Attacking the Problem Requires New Strategies
  - Identify O&S Requirements in the ORD
  - Evaluate Existing Data from the LRC (Especially on Legacy Systems)
  - Trade off Analysis of Design Alternatives to Reduce Cost





## ***What's O&S Cost?***

- No One Tool Will Do It All, We Need to Identify Which are the Best Tools
- Right Now We Can't Measure
- We're Not Sure!
- Lack Tools to Quantify/Predict
- We're Different, We Need to Be Ready for War
- Just Focus on Reliability; Cost Will Take Care of Itself
- Who is Responsible?
- PM is Responsible but Lack Funding

***How can we manage  
what we can not measure?***



***"The difficulty lies, not  
in the new ideas, but in  
escaping from the old ones..."***

***John Maynard Keynes, Economist***



# ***O&S Cost Reduction Ideas***

## **A Major PEO IEW&S Initiative for CY98**

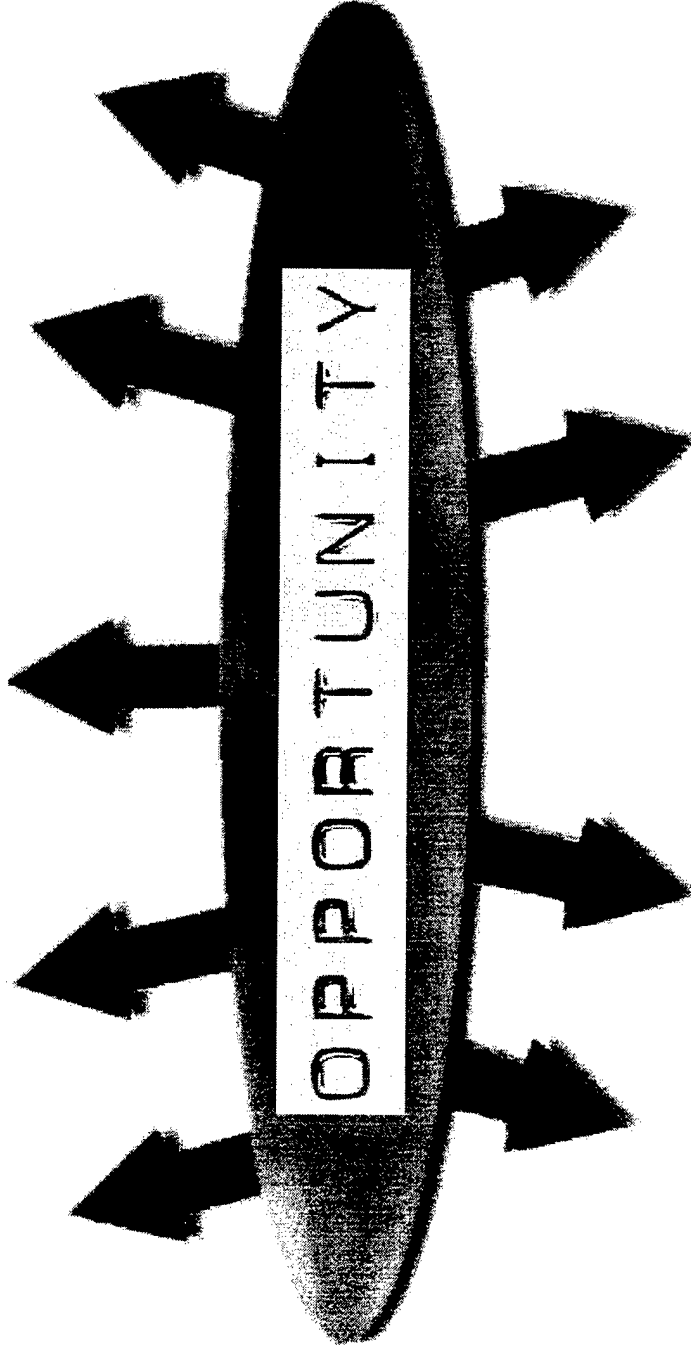
- Influence O&S Cost Consideration in ORD
- ID/Prioritize O&S Cost Drivers as Criteria in Source Selections
- Modernization Through Spares (MTS)
- Cost as an Independent Variable (CAIV)
- Open Architecture Design
- Reliability Maintainability Supportability
- Value Management Methodology
- Velocity Management
- Obsolesce Risk Management
- Life Cycle Cost Modeling
- Performance Based Logistics
- Commercial Standards
- Just in Time Support
- Electronic Support Centers/Regional Support Centers
- World-Wide Distribution Capabilities
- Incentivize Contractors
- Innovative Warranties to Evidence Product Quality
- Horizontal Technology Insertion
- Product Reuse
- Modularity Without Sacrificing Capability
- Single Process Initiative
- Dual-Use
- Flexible Computer Integrated Mfg/ Intelligent Product Data
- Leasing
- Performance Based Specs & Std's.
- COTS/NDI



# O&S Cost Reduction

***"Where's the Opportunity?"***

Requirements → ORD → RFP/Source → Contract → Deployment/  
Selection Implementation Sustainment



Development → Production → Deployment → Disposal →

## A Fertile Area



# O&S Cost Consideration "Early On" in Life Cycle

**Use of CAIV Principles Nets  
Expected Savings!** →

- CIDDS: Negotiated ORD Requirement for Cold Storage - \$23M
- CIDDS: Increased Operational Availability from 48 hours to 48 days

**Use of Commercial  
"Off-the-Shelf" Saves!** →

- Sentinel: Conversion to Commercial Software & Elimination of Militarized UYK-44 Saves \$15.8M

**Use of Contractor Warranty vs.  
Depot Support Reduces Cost of  
Ownership!** →

- JTT: 10 Year Warranty Expected to Save Army \$21.5M

**Use of Existing Technology  
Reduces Production and O&M  
Costs!** →

- Sentinel: Use of Army Std Generator Saves \$8.5M in Production Costs & \$8.5M in O&M Savings

**Use of Modeling to Determine Best  
Maintenance Concept to Save O&S!** →

- Current Night Vision Thermal Omnibus Solicitation

**Use of Competition to Determine  
Best Support Concept to Reap  
O&S Benefits!** →

- Upcoming Image Intensification Integrated Logistics Support Solicitation

**Use of Oper Rqmts Doc (ORD) to  
Emphasize Cost Reductions!** →

- Advanced Common Sensor Candidate System for Early Consideration of O&S in ORD



# A Success Story

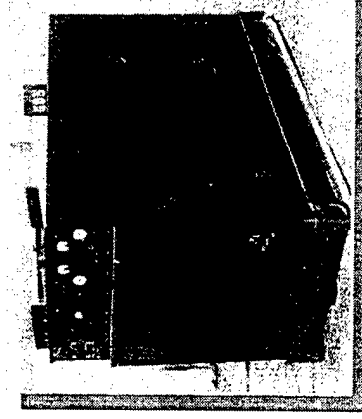
## Sentinel Reuse:

### Sentinel Power Source Cost Reduction Efficiencies



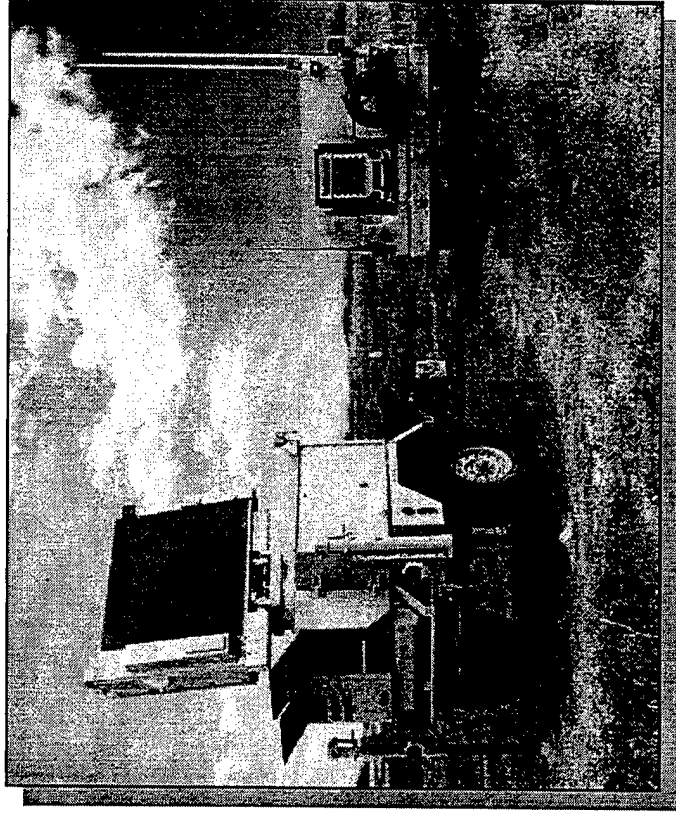
Achieves  
Army Thrust  
to Reduce  
Power Sources Costs  
By 50%

- Army Selects MEP-813 Tactical Quiet Generator (TQG) for the Sentinel
- \$5.8M Savings in Production Due to Reuse
- \$4.4M Savings in O&M Costs
- Common Logistics With FAAD C<sup>2</sup>





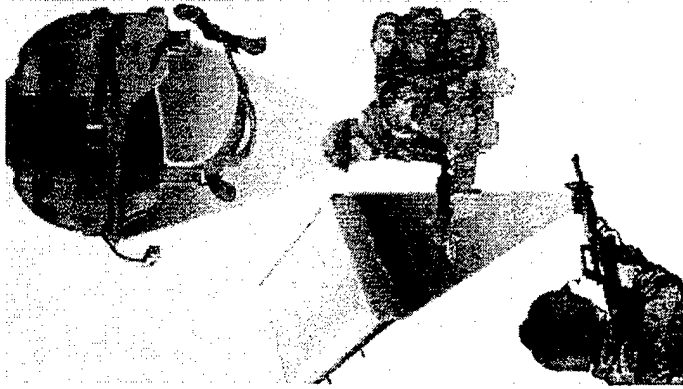
## ***Use of "Commercial-Off-the-Shelf" Reduces Life Cycle Software Support Requirements***



**Sentinel System  
AN/MPQ-64**

- Conversion to Commercial Language and Rehost on Existing Processor
- Elimination of Militarized UYK-44 and Associated Support Saves \$15.8M

# ***Power Management Sustainment***



- Energy Strategy - Focus on Energy Consumption as Well as Energy Supply
- System Design - Consider Energy Efficiency in All Phases & All Segments (e.g. Software, System Architecture, Interfaces, Protocols)
- Use of Commercial Technology - Leverage Advances in Consumer Electronics
  - Military Applications are Far Behind Commercial - Even When Designed by Same Company (Source: NRC)

***CIDDS  
Utilizing Motorola Cellular  
Power Source Resulted in  
Increased Operational  
Availability From 48 Hours  
to 40 Days!***



# **Commercial O&S Savings Initiative**

**(COSSI)**

- Objective - Insert Commercial Products/Processes into Existing Fielded Systems to Reduce O&S Costs
  - Stage I (DUAP Funds) - Deliver Prototypes, Demonstrate Savings Potential
  - Stage II (Service Funds) - Procure Kits and Retrofit Systems

## **COSSI Programs**

**\$13M Savings  
in O&S  
Projected**



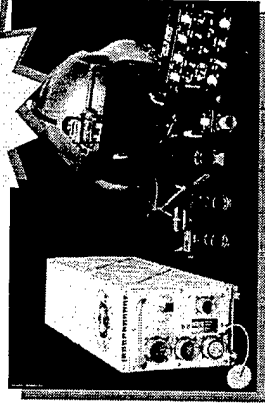
### **Replace GR/CS Mainframe Computer with Commercial UNIX/VME Based Maxion System**

- 6 Fold Reduction in Size
- 7 Fold Reduction in Unit Cost
- 30 Fold Increase in Processing Speed

### **Replace ANVIS HUD CRT Display with Flat Panel Technology**

- Reduced Weight/Size/Power
- 2 Fold Reduction in Unit Cost
- Multiple Vendors (Vice Current Single Vendor)

**\$15M Savings  
in O&S  
Projected**



***“Best Commercial Practice”***



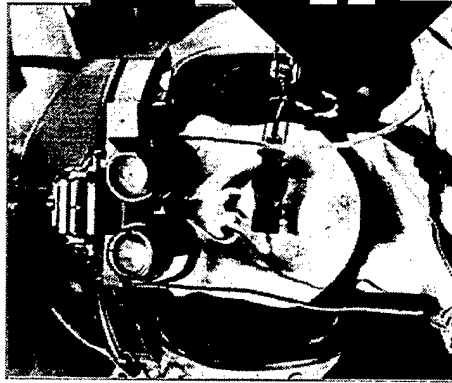


# Image Intensifier (I2) Turn-in Pilot Initiative



Return of \$600.00 per  
System or One Free  
ANVIS for Every 10  
Purchased!

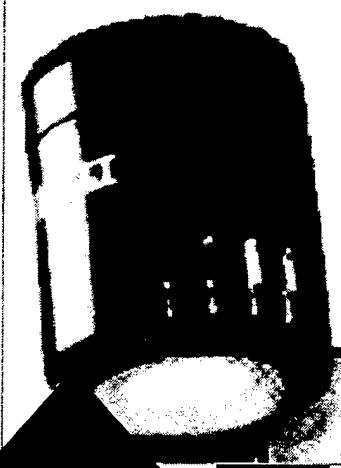
- Pilot Program Ongoing Between PEO IEW&S and ITT Night Vision
- Turning in Early GEN III ANVIS Systems for Upgrade to Latest Omni IV Level
- Turned in Tube Being Repackaged in Commercial System for Reduced Price System for Critical Search and Rescue Missions



Early GEN III  
Tube Turn-in

New OMNI IV  
Performance

Government Gets  
Much Needed  
Upgrades for ANVIS  
Systems with Credit  
for Older Tubes



ANVIS Tube in  
Commercial  
Package  
Reduced Price

ITT Gets Business  
for Upgrade of  
ANVIS and Ability to  
Resell Older Tubes  
for Commercial  
Market

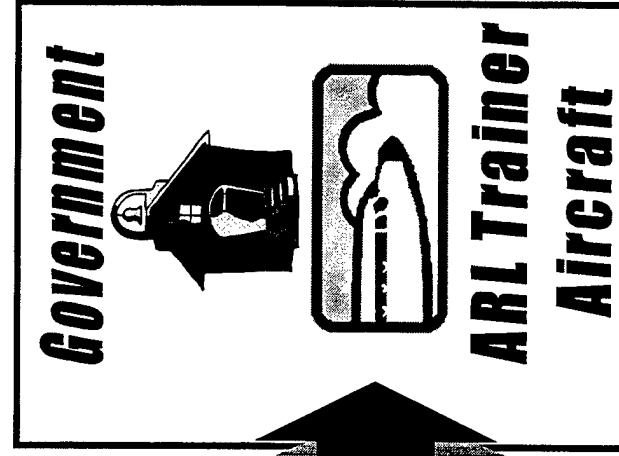
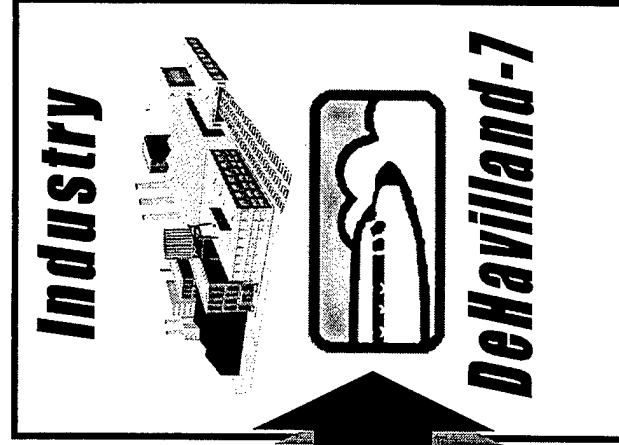
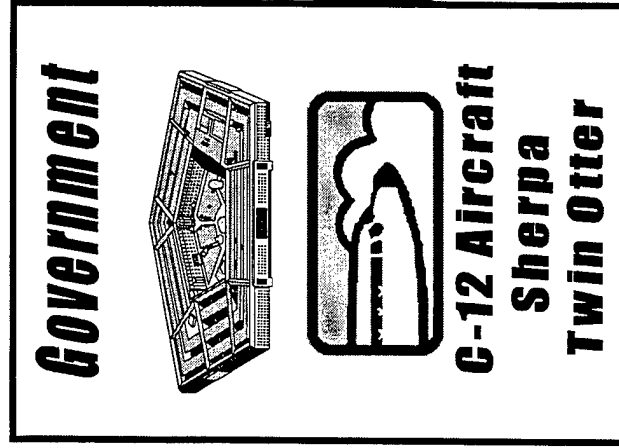


Commercial Market  
Gets Quality Military  
Equipment at  
Affordable Prices for  
Critical Search And  
Rescue Civic Missions



# ***A Business Opportunity to Reduce O&S***

## **Aerial Common Sensor "Trade-A-Plane" Program**



- *Trade of Excess Commercial Aircraft to Satisfy Army Trainer Rqmt.*
- *CBD Announcement Nets Three Potential Vendors*

**Gov't Receives  
3 ARL Trainer  
Aircraft and  
Recoups  
Additional  
Savings**

**Mitigates  
CONUS  
Resident  
Training**

**Reduces Wear  
to Fielded  
Systems**

**Cost Avoidance  
of \$2.5M Annually  
in Contr Training &  
Aircraft Leasing  
Costs**



# Factors Shaping the "Business" Decision

## Industry Perceptions

### *Military*

- Acquisition Contract Driven
  - Framed in Boiler Plate RFQ
  - Specification Directed
  - No Standard Pricing
  - "Fuzzy" Decision Process for Determining "Best Value"
  - Short Range/Cost to Field Look With Long Range Cost of Ownership "Best Guesses"
  - No Way to Quickly Capture/Insert Improved Technology
  - "Knee Jerk" Response to Requirements

### *Commercial*

- Voluntary System Driven by Market Factors (Cost, Service & Time)
  - Best Commercial Practices
  - Value for the Money/Standard Prices
  - Product Performance & Warranty at That Price
  - Service
  - Improved Technology Evaluation Through Customer Feedback
  - Long Range Marketing and Sales Goals Planned
  - Long Term Trends Visible & Measured

*"In the Military Market, You Run Around and Brag About a Piece of Performance or a Piece of Equipment and What it Can do. In the Commercial Market, You Have Only One Shot: Can it Make Money?"*

~ Charles Kaman  
Chairman, President & CEO, Kaman Corp.  
*Defense News*, April 7-13, 1997

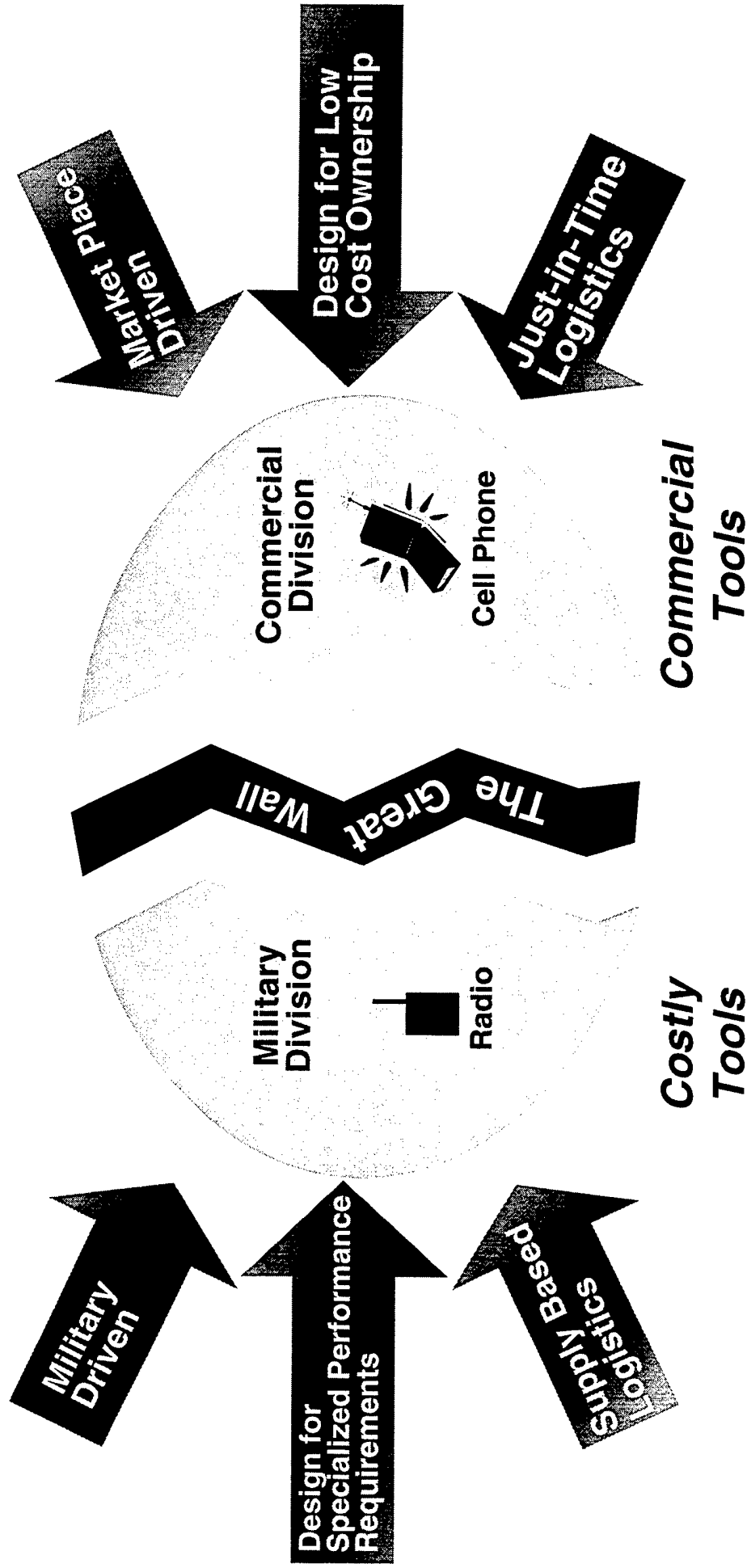


# Change

*“Faced with a choice between  
changing one’s ways and proving that  
there is no need to do so, almost  
everybody gets busy on the proof”*

- John Kenneth Galbraith

# Contract Knowledge Dichotomy

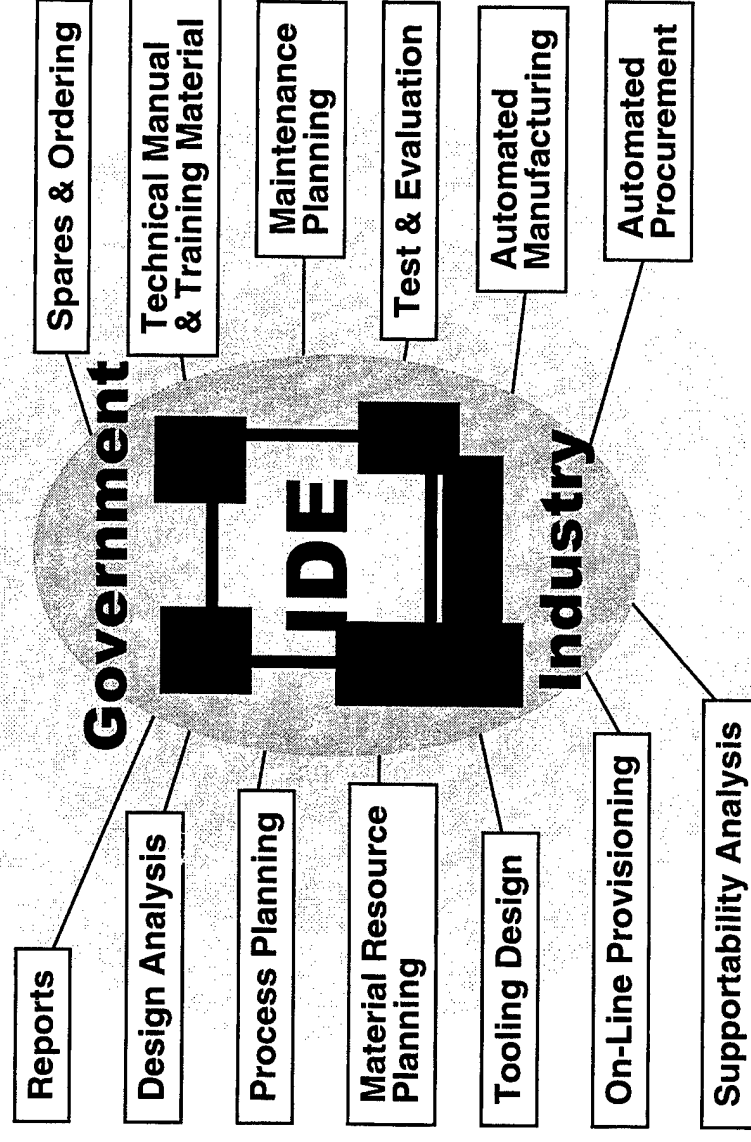


*We Need to Learn Lessons From the Commercial Side*



# Integrated Data Environment (IDE)

- PEO IEW&S Working with Industry Partners to Transition From Traditional Paper-Driven Systems to IDE
  - Executive Session with DPEO (4 Mar 98)
  - Performance Based Requirements Briefing to Industry (April 98)
  - Implementation on New Programs (4Q98)
- Strategy is to Capitalize on the Contractor's Databases for Common Data Element Sharing
- JCALS System Being Used as Pilot for Several Programs
  - IEW&S Omnibus Support Contract
  - CIDDS Contract



*“I am setting a corporate goal of digital operations being the method of choice for all acquisition management and life cycle support information...by the end of 2002.”*

- SECDEF Policy Memo  
2 July 1997



## **NDI/COTS vs. the Military System**

- To Reduce Acquisition Costs we Endeavor to Produce NDI/COTS Equipment, But as a Whole we Fail to Take Advantage of the Commercial Support System that Goes with the Hardware/Software
  - Warranties & Extended Warranties
  - 1-800 Help Lines and Service Areas
  - Field Support Representatives
- We try to fit NDI/COTS Equipment into our Military Processes Instead of Leveraging the Commercial System
  - The Commercial Support System and the Military Support System have a Different Focus
    - Military: Availability at all Costs & No Risk
    - Commercial: Availability While Balancing Cost & Risk

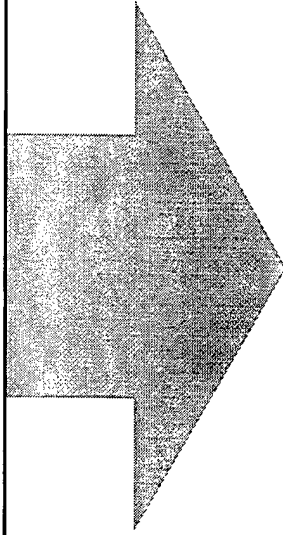
***We need to not only accept and encourage the implementation of NDI/COTS hardware & software but also the support system that goes with it!***



# Supply Support Paradigm

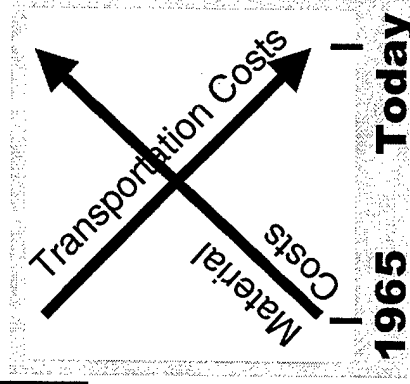
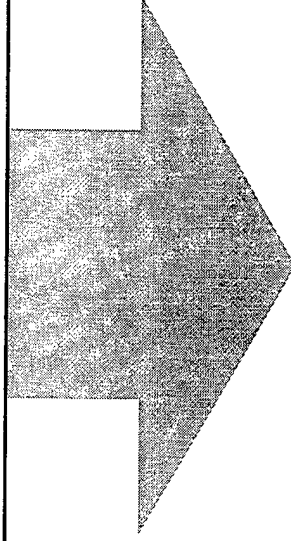
**30 Years Ago**

**Material Costs      Low**  
**Transportation Costs      High**



**Today**

**Material Costs      High**  
**Transportation Costs      Low**



**Forward  
Deploy Spares**

**Leverage The Available  
Commercial Transportation  
System to Minimize Cost  
of Procuring and Storing  
Spare Parts?**

**C-MRL Savings of 57%  
in Transportation  
Utilizing US Post Office**





## *Causing Change...*

*“In any moment of decision  
the best thing you can do is the  
right thing, the next best is the  
wrong thing, and the **WORST**  
thing you can do is **NOTHING.**”*

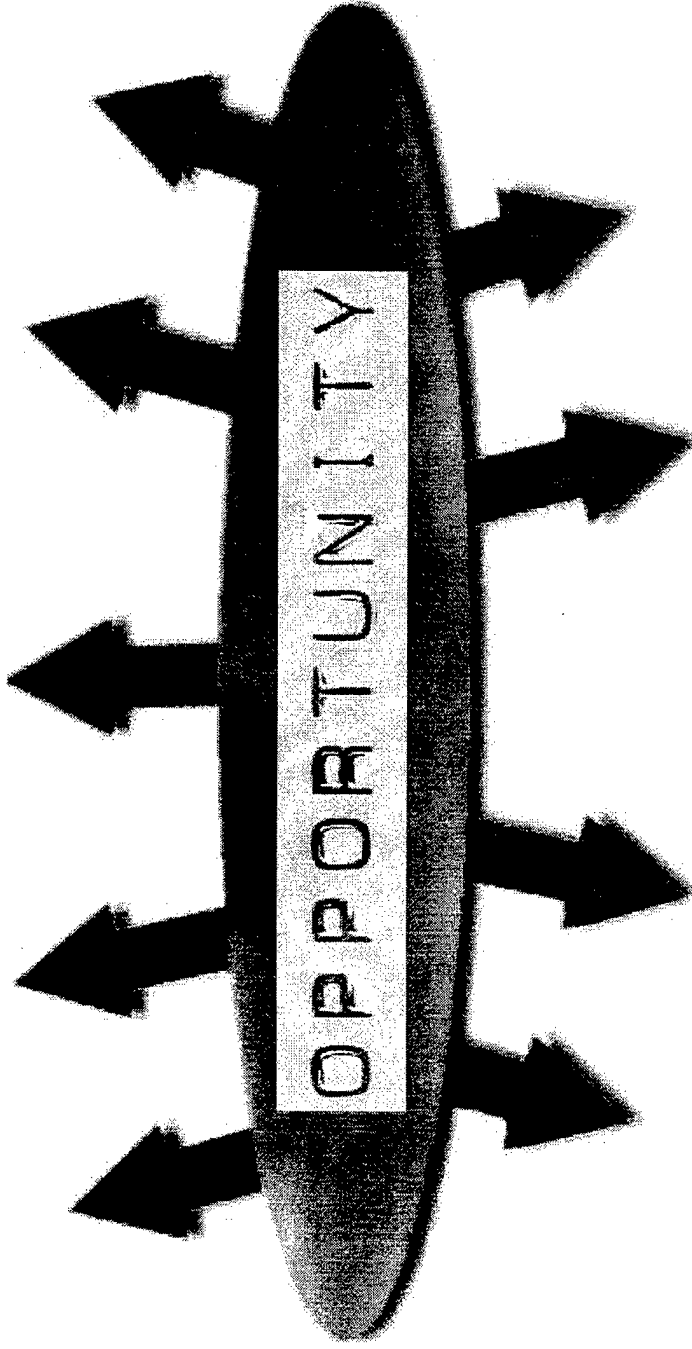
*- Theodore Roosevelt*



# O&S Cost Reduction

***“Where’s the Opportunity?”***

Requirements → ORD → RFP/Source → Contract → Deployment/  
Selection Implementation Sustainment



Development → Production → Deployment → Disposal →

***“We need output metrics to measure progress...”***

# ***Tactical Unmanned Aerial Vehicles (TUAV) Sensor Integration Plan***





## **Centralized Management for UAV Sensors**

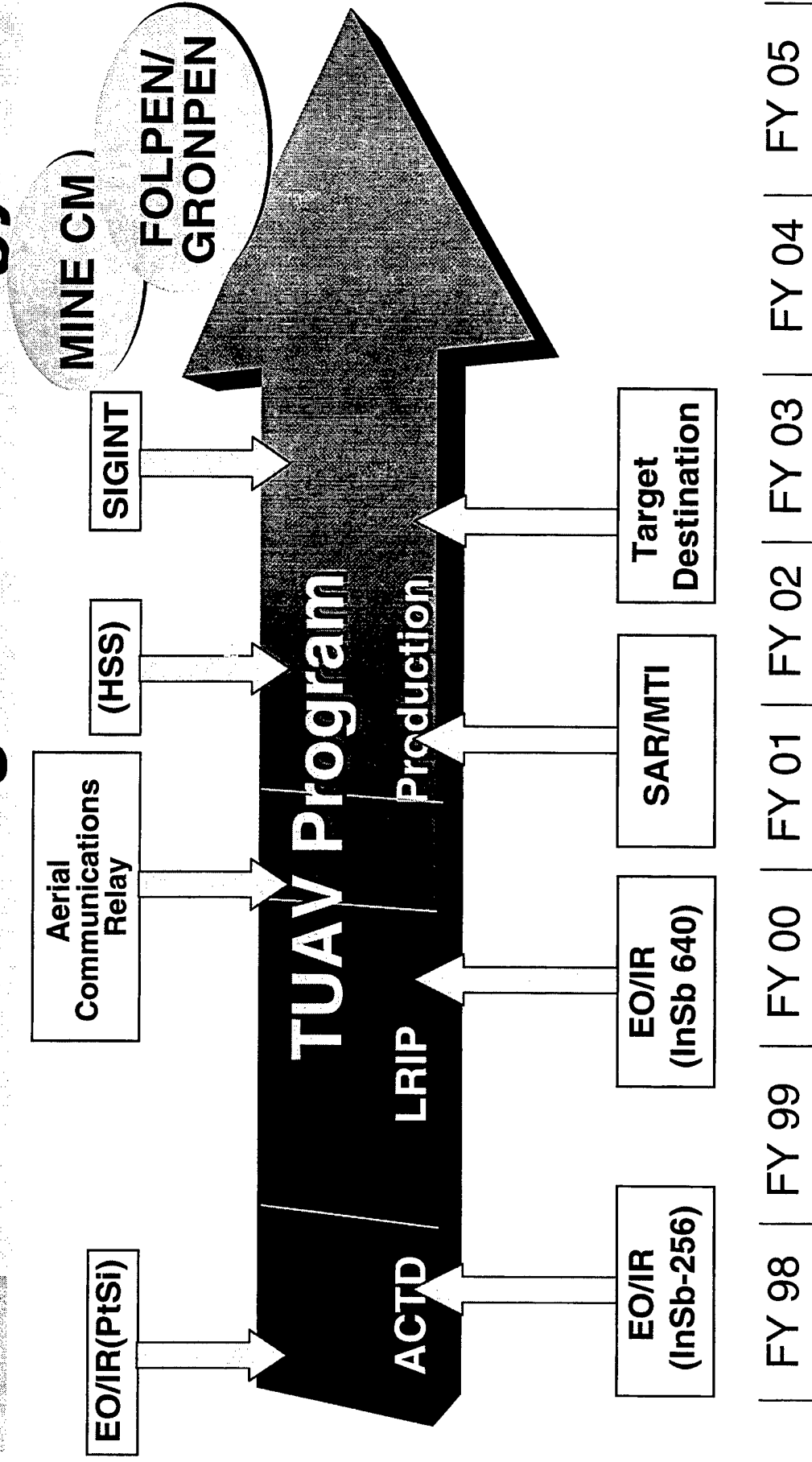
*“I am designating PEO-IEW&S as the centralized manager for the development, acquisition, testing, fielding, support and product improvement for the sensor payloads for the UAV program”*

**Ken Oscar**

**Dated: 30 MAR 98**



# Sensor Integration Strategy



*Objective: Sensor Development Path that Allows for the Lowest Schedule, Cost and Technical Impacts for Integration of New Sensor Capabilities onto TUAV*



# **CINC/Service UAV Mission Prioritization**

## **TUAV Payloads**

<b>Priority</b>	<b>Mission</b>	<b>Payloads</b>	<b>Assessment of Availability</b>
1	Reconnaissance	EO/IR, SAR/MTI, CUERS	Near/Mid Term
2	Mine Countermeasures	IR, PMMW, FOLPEN	Far Term
3	Target Designation	Laser Target Designators	Mid Term
4	Battle Management	EO/IR, SAR/MTI	Near/Mid Term
5	Chem/Bio	Hyper-Spectral Sensors	Mid Term
6	SIGINT	SIGINT (COMINT, ELINT)	Mid Term
7	Counter Camouflage/Deception	Hyper-Spectral Sensors	Mid Term
8	Electronic Warfare	ESM/Jammer	Mid Term
9	Combat Search & Rescue	EO/IR, SAR	Near/Mid Term
10	Comm/Data Relay	Aerial Communications Relay	Near Term
11	Information Warfare	Specialized Electronic Attack	Mid Term

**Source: JROC UAV Special Study Group Coordinated with Service and Operational CINC Staffs**



# TUAV Program Plan-Our Perspective

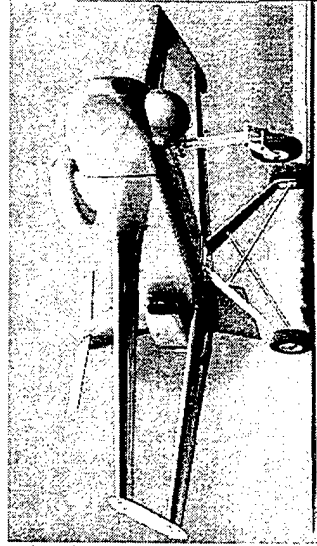
*“Platforms Must be  
Sensor Friendly”*

## Outrider Meets Army Requirements

- Continue With Joint Outrider Program as Long as Navy Still supports
- PEO-IEW&S Still Maintains TUAV Sensor Management

## Outrider Does Not Meet Army Requirements

- Initiate a Competitive Solicitation for a TUAV System Managed by PEO-IEW&S/PM TUAV



Outrider ACTD

Outcome of  
Military  
Utility  
Assessment

*Even If Outrider is Successful the Navy May Still Move Out with a Different Solution*



## ***KPP's (Proposed)***

- Provide All Weather, Day/Night TUAV Capability to Support Army Brigade Commander
- Take off and Landing on a Soccer Field Size, Unprepared Surface
- Deployable on 1C-130 to Support a 72 Hour Mission
- Operable and Maintainable by a Minimal Number of Army Personnel
- Provide for Payload Diversity and Facilitate Timely Interchangeability
- Production CAIV: TBD
- LCC CAIV: TBD





## Close Range TUAV Requirements Banding

Priority 1 (Basics)		Priority 2 (Preferred)	Priority 3 (Desired)
AV Range 50 km		AV Range 100 k	*Payload: Payload capable of NIIRS 7 when flying at operational altitude**- Number 2 priority payload in SAR/MTI
AV Endurance 3 hrs @ 50km		*OPTEMPO: 8 hours of operation in a 12 hour period for 96 hours	
*OPTEMPO: 6 hrs of operation in a 12 hour period for 72 hours using 6 ops. & 2 mains		*Launch & Recovery: Performed without use of an External Pilot	
		*Payload: Primary Day/night passive imagery EO/IR-Capable of incorporating MMPs	Payload Wt: not less than 80 lbs
		Component Weight: NTE the ability of 2 people to move	Component Weight: Air Vehicle Does not Require Hoist to Remove From Transport Vehicle-NTE 100lbs. Per comp.
Launch & Recovery: Unprepared surface 30m x 75m with 10 m obstacles at each end		*Transportability: Entire system transported in 2 HMMMVW with shelters and 1 trailer	RVT Range: 100km
Fuel: MOGAS		TCS: TCS Compatible	*Fuel: HFE
Cost: Production CAIV LCC CAIV		RVT Range: 20km	
*Transportability: 72 hrs of operation deployable in 1 C-130		Payload Wt: not less than 60 lbs	

\* Cost Drivers



# **TUAV Parallel Path Ahead**

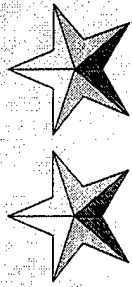
## **Outrider ACTD**

- Continue ACTD MUA
- Extend MUA to assure Adequate Data Obtained
- Evaluate Results Against Army Requirements

## **Competitive Solicitation**

- Prepare for Competitive Solicitation in Parallel with MUA
- Conduct RFI's to Update Information from last Years Input and focus Specifically on Army Close range TUAV Requirements
- Follow-on One-on-Ones with Industry
- Be Ready to Execute

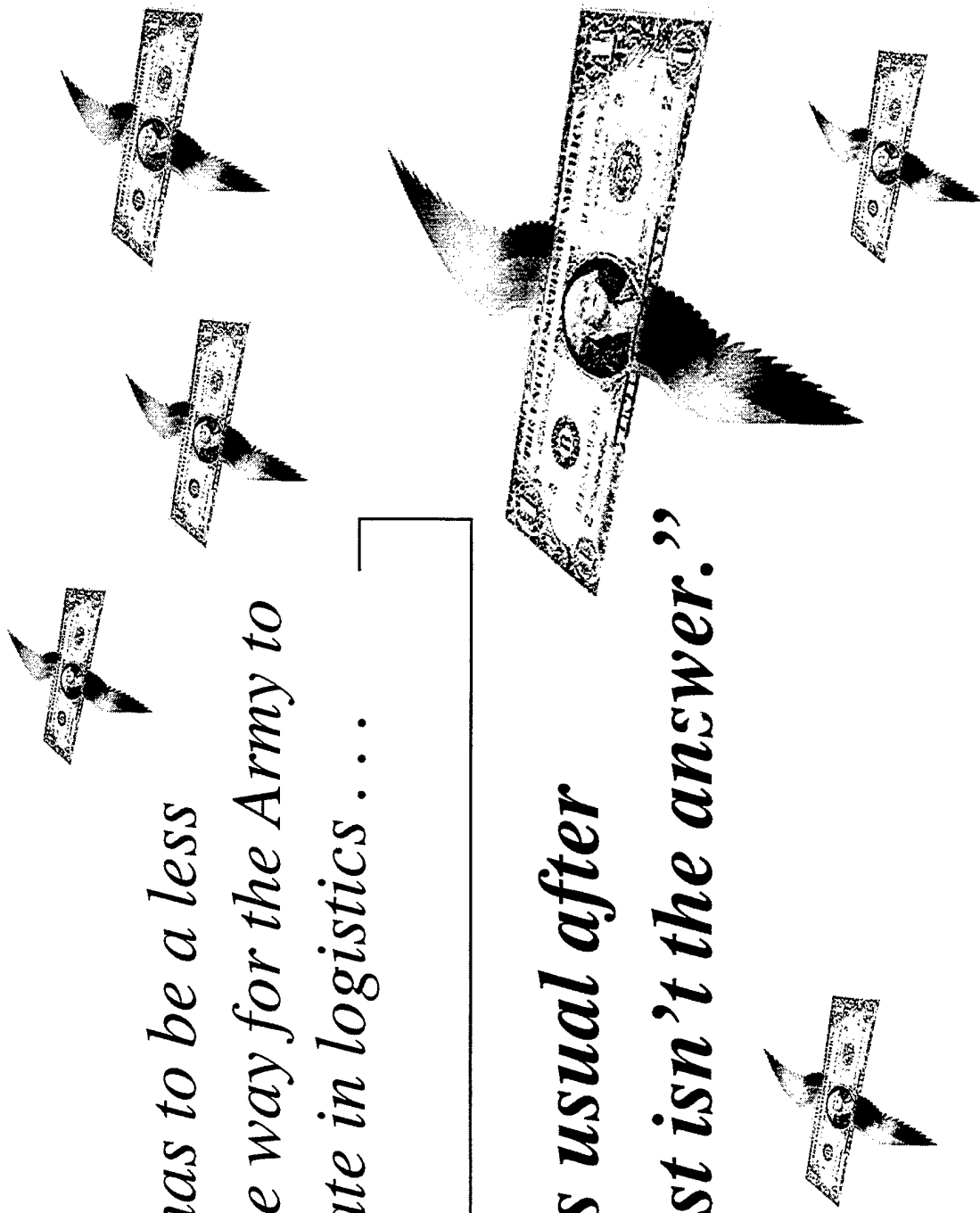
*Decision Point is after Completion of MUA*



*“There has to be a less  
expensive way for the Army to  
participate in logistics . . .*

*→ Business as usual after  
25 years just isn’t the answer.”*

*MG David Gust, PEO IEW&S  
January 1998*





# NOTES

**Project Manager -  
Night Vision/Reconnaissance,  
Surveillance and Target Acquisition  
Business Opportunities**

**Doug Wiltzie, HTI Branch Chief, PM NV/RSTA**

**UNCLASSIFIED**

## POINT PAPER

SFAE-IEW&S-NV

27 April, 1998

SUBJECT: Long Range Advanced Scout Surveillance System (LRAS3)

OBJECTIVE: The system will provide real-time imagery for the Scout to quickly detect, recognize, and report targets of Military interest while operating outside threat acquisition and engagement ranges.

### FACTS:

- One long range advanced scout surveillance per scout High Mobility Multipurpose Wheeled Vehicle (HMMWV), scout platoon and cavalry regiment.
- Give scouts a Stand-off Range they have never had before.
- Improves Target Detection, Identification and Hand-off.
- First Recon/Surveillance System developed specifically for the Scout Mission.
- Allows Scouts to conduct reconnaissance missions while remaining outside threat acquisition and engagement ranges
- Milestones listed below reflect the planned schedule for LRAS3.
  - Engineering and Manufacturing Development (EMD) Contract Awarded to Raytheon 4QFY97
  - Development Test 1QFY99
  - Operational Test 3QFY99
  - RFP 4QFY99
  - Milestone III 1QFY00
- This will be a Firm-Fixed-Price, 5-7 Year production. Approximately 650 systems will be produced.

BRIEFER: Mr. Doug Wiltsie, Branch Chief HTI FLIR, PM NV/RSTA (703) 704-1759.

S/For/Joni Forman, DPM  
Jeffrey A. Sorenson  
Colonel, US Army  
Project Manager  
Reconnaissance, Surveillance &  
Target Acquisition

## POINT PAPER

SFAE-IEW&S-NV

27 April, 1998

SUBJECT: Horizontal Technology Integration 2<sup>nd</sup> Generation FLIR & Standard Advanced Dewar Assembly (SADA II).

OBJECTIVE: The Army Horizontal Technology Integration of the Second Generation FLIR (2<sup>nd</sup> Gen. HTI) will enable the Army to insert a common second generation sensor ( B-Kit) into the Army's highest priority ground battlefield platforms: M1A2 SEP, M2A3 Bradley Fighting Vehicle, the Long Range Advanced Scout Surveillance System (LRAS3) and the Line of Sight Antitank (LOSAT). The B-Kit is integrated into the various platforms via a sight specific A-Kit.

### FACTS:

- EMD awarded to TI and HAC in July 1994
- LRIP awarded to TI and HAC in April 1997
- Milestones:
  - RFP Release (SADA II) Aug 98
  - Contract Award (SADA II) Dec 98
  - RFP Release (HTI FLIR) Jul 99
  - Contract Award (HTI FLIR) Dec 99
  - MSIII – 2Q00
  - FUE – 3Q00
- Standard Advanced Dewar Assembly (SADA II) will be a Firm-Fixed-Price procurement. The contract is planned to run four years with a base quantity of 392 systems and three option years. HTI 2<sup>nd</sup> Generation FLIR will be a Firm-Fixed-Price five-year multi year procurement. Approximately 3,300 B-Kits and systems will be procured.

BRIEFER: Mr. Doug Wiltsie, Branch Chief HTI FLIR, PM NV/RSTA (703) 704-1759.

S/For/Joni Forman, DPM  
Jeffrey A. Sorenson  
Colonel, US Army  
Project Manager  
Reconnaissance, Surveillance &  
Target Acquisition

POINT PAPER

SFAE-IEW&S-NV

27 April, 1998

SUBJECT: Aviation FLIR

OBJECTIVE: Aviation FLIR is an upgrade on the AH-64 Apache from 1<sup>st</sup> Gen FLIR technology to 2<sup>nd</sup> Gen FLIR. It improves pilotage and targeting sensors. Improves target range, FOV, and Reliability. Sensor improvement commensurate with Comanche performance.

FACTS:

- EMD currently projected to start FY02.
- BAA Traded-off studies analysis ongoing.
- Potential to be GFE to Apache PVS contract.
- Army continuing efforts to accelerate program.
- Approved I-FLIR ORD dated 9 Dec 93.
- Milestones listed below reflect the planned schedule for Aviation FLIR.
  - Draft RFP FY01
- This will be a cost plus development contract.

BRIEFER: Mr. Doug Wiltsie, Branch Chief HTI FLIR, PM NV/RSTA (703) 704-1759.

S/for/Joni Forman, DPM  
Jeffrey A. Sorenson  
Colonel, US Army  
Project Manager  
Reconnaissance, Surveillance &  
Target Acquisition



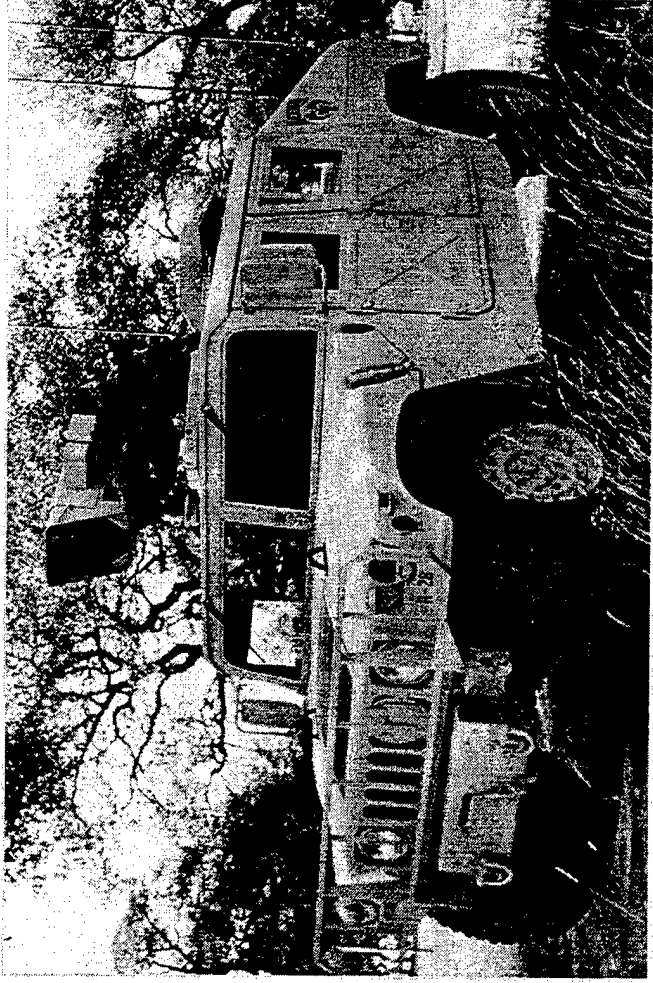


# **AGENDA**

- **LRAS3**
- **HTI 2nd Generation FLIR**
- **Aviation FLIR**

# **Long Range Advanced Scout Surveillance System (LRAS3)**

# **Long Range Advanced Scout Surveillance System (LRAS3)**



**An Integrated Long Range Reconnaissance,  
Surveillance and Target Acquisition Sensor System  
for Maneuver Battalion Scouts to Use on a High  
Mobility Multipurpose Wheeled Vehicle (HMMWV) or  
Manportable Configurations**

# **Long Range Advanced Scout Surveillance System (LRAS3) Operational Concept**

**The System Will Provide Real-Time  
Imagery for the Scout to Quickly Detect,  
Recognize, and Report Targets of  
Military Interest While Operating  
Outside Threat Acquisition and  
Engagement Ranges**

# **Long Range Advanced Scout Surveillance System (LRAS3) System Requirements**

- **Range                      > 2 Gen FLIR**
- **Mount                    HMMWV & Tripod**
- **Weight                  < 120 Pounds**
- **Far Target Location System**
- **Advanced FLIR w/Long Range Optics**
- **LRF w/ Range Comparable to FLIR**
- **Day Video Camera with Comparable Range**
- **All Weather Capable**

# **Long Range Advanced Scout Surveillance System (LRAS3) Status**

- Currently Maneuver Battalion Scouts Operate Within Threat Acquisition Engagement Ranges**
- New Generation FLIRS Provide Greater Ranges**

# **Long Range Advanced Scout Surveillance System (LRAS3) Scope of Effort**

- **One Long Range Advanced Scout Surveillance Per Scout High Mobility Multipurpose Wheeled Vehicle (HMMWV), Scout Platoon and Cavalry Regiment**
- **Give Scouts a Stand-off Range They Have Never Had Before**
- **Improve Target Detection, Identification and Hand-Off**

# **Long Range Advanced Scout Surveillance System (LRAS3) Scope of Effort (Cont.)**

- **First Recon/Surveillance System  
Developed Specifically for Scout Mission**
- **Allows Scouts to Conduct  
Reconnaissance Missions While  
Remaining Outside Threat Acquisition  
and Engagement Ranges**



# **Long Range Advanced Scout Surveillance System (LRAS3) Milestones**

- 2QFY94      Operational Requirement  
Document (ORD)**
- FY 96      Head Start Effort Tradeoff  
Studies by Industry Input to  
E&MD Procurement Package**
- 4QFY97      Milestone II Decision**

**Long Range Advanced Scout Surveillance System  
(LRAS3)  
Milestones (Cont.)**

- 4QFY97      Engineering and Manufacturing Development (EMD) Contract Awarded to Raytheon**
- 1QFY99      Development Test**
- 3QFY99      Operational Test**
- 1QFY00      Milestone III**

**Long Range Advanced Scout Surveillance System  
(LRAS3)  
Contract Opportunity**

**TITLE: Long Range Advanced Scout Surveillance System**

**OBJECTIVE: 650 LRAS3 Systems**

**CONTRACT TYPE: Fixed Price;  
5 - 7 Years Production**

**KEY MILESTONES: RFP 4QFY99**

**ESTIMATED VALUE: \$200M - \$250M**

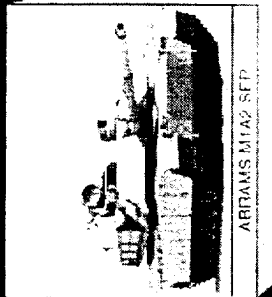
**POC: MAJ Mark Conley (703) 704-1941**

**CONTRACT OFCR: Deborah Gilligan (732) 532-3506**

# HTI 2nd Generation FLIR



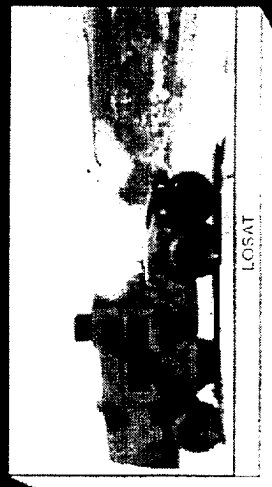
BRADLEY M1A3



ABRAMS M1A2 SEP



LRSV



LOSAT

OWN THE NIGHT

COMBAT IDENTIFICATION

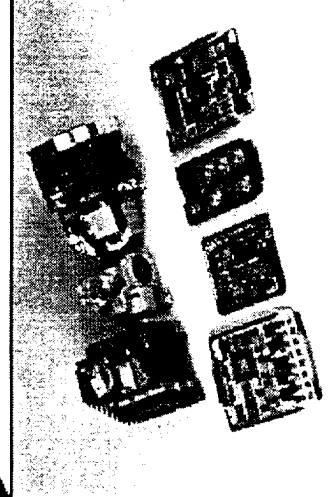
BATTLEFIELD DIGITIZATION

# HORIZONTAL TECHNOLOGY INTEGRATION

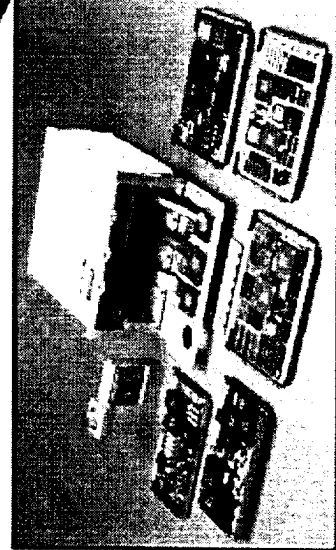
## 3RD GENERATION FLIR



GROUND B-KIT

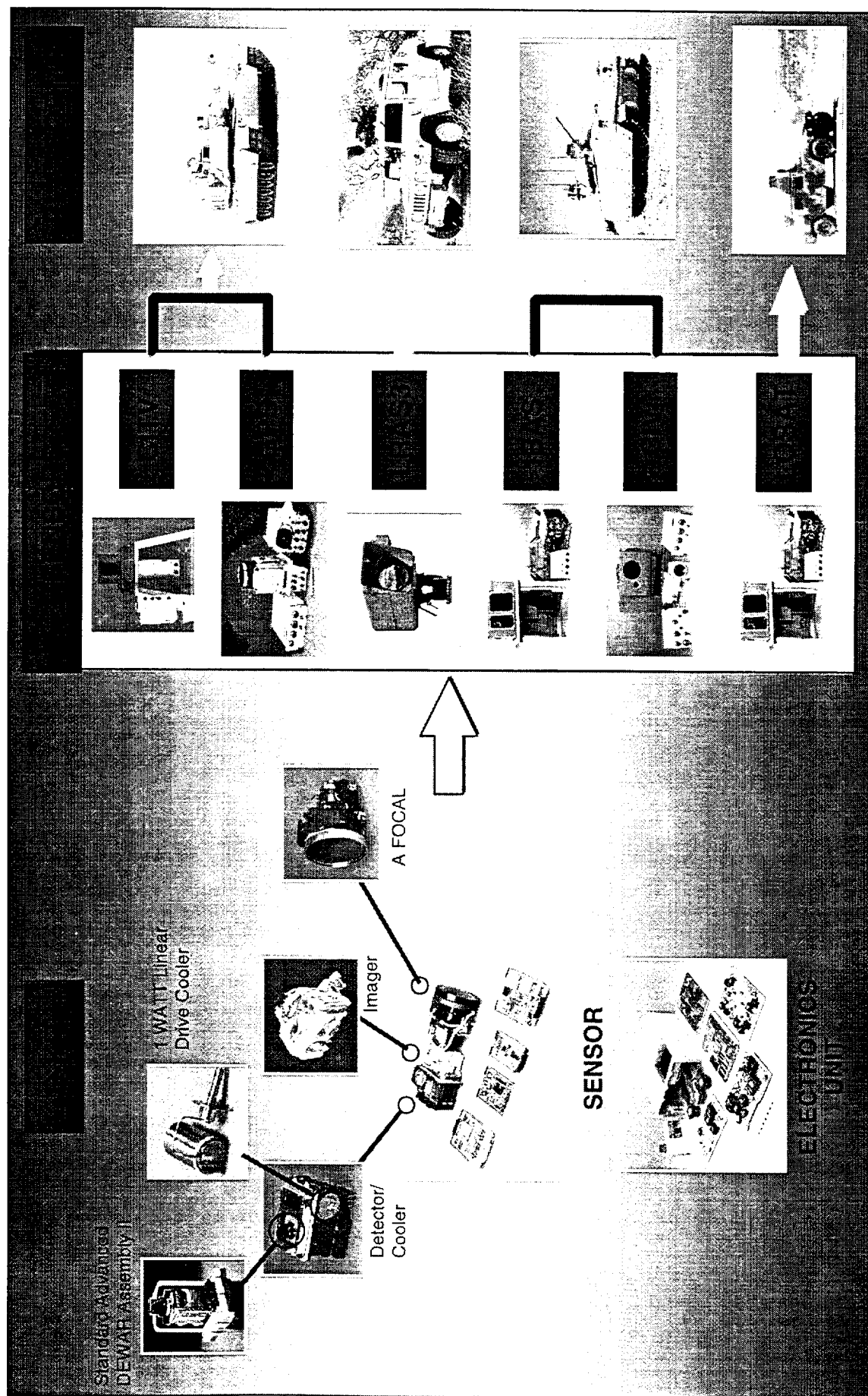


SENSOR UNIT



ELECTRONIC UNIT

# Horizontal Technology Integration 2nd Generation FLIR Ground Systems



# Horizontal Technology Integration

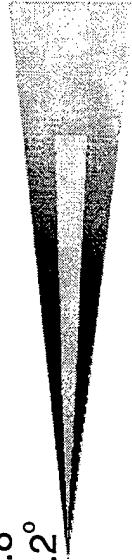
## 2nd Generation FLIR

### Battlefield View

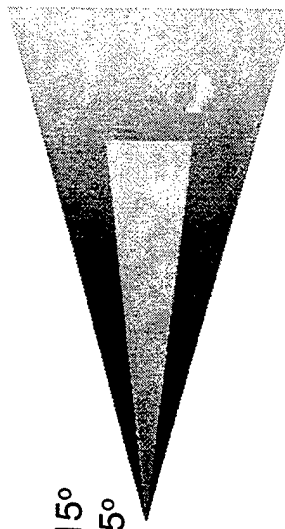
1970's Technology

- 1970's Technology
- Analog

WFOV 3.4° x 6.8°  
NFOV 1.1° x 2.2°



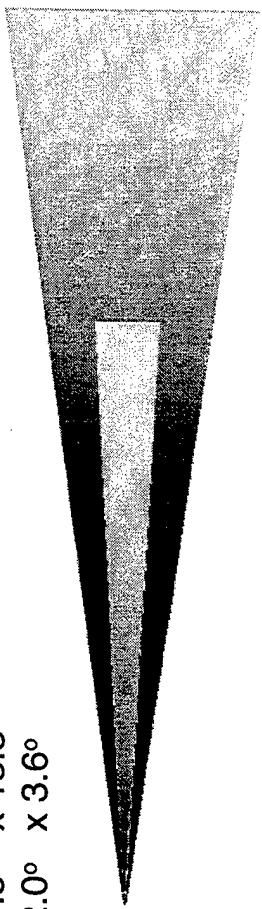
WFOV 7.5° x 15°  
NFOV 2.5° x 5°



1990's Technology

- 1990's Technology
- Digital

WFOV 7.5° x 13.3°  
NFOV 2.0° x 3.6°



Comparison

Target Size: 2.3 x 2.3 m  
 $\Delta T$ : 1.25° C P=70  
70% ATM

**Doubles Combat  
Identification Ranges**

**44% Increase  
in Targets Hit**

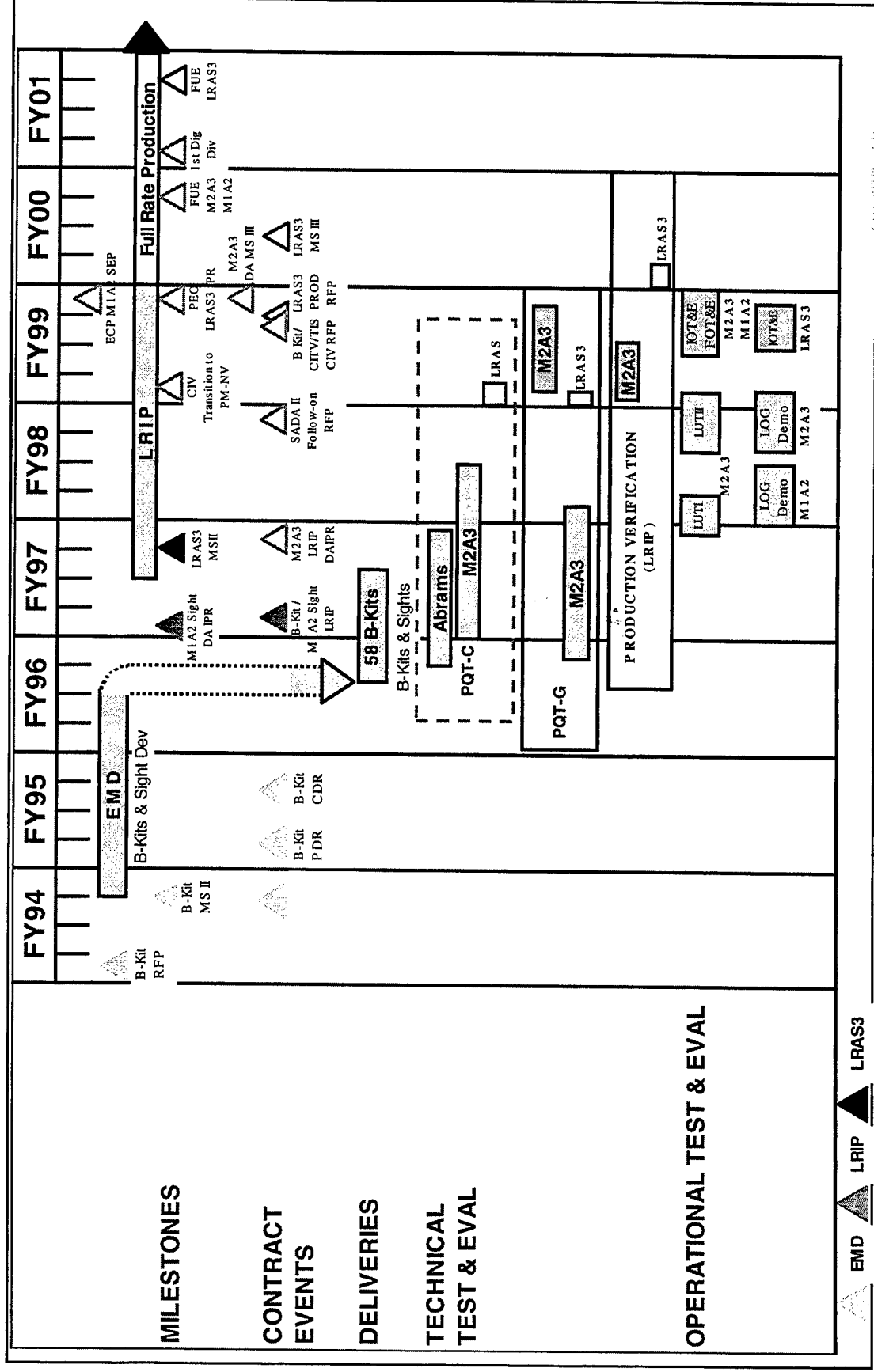
# **Horizontal Technology Integration 2nd Generation FLIR Status**

- **Engineering & Manufacturing Development  
Program Scheduled for Completion 31 May 98**
- **LRIP Contracts Awarded Apr 97; First LRIP B-Kit  
Deliveries May 98**
- **Bradley A2 Limited User Test II 3QFY98**
- **Bradley/Abrams IOT&E 3QFY99**
- **HTI 2nd Gen FLIR Milestone III 1QFY00**
- **Abrams First Unit Equipped May 00**
- **Bradley First Unit Equipped Sep 00**



# Horizontal Technology Integration 2nd Generation FLIR Program

## Schedule



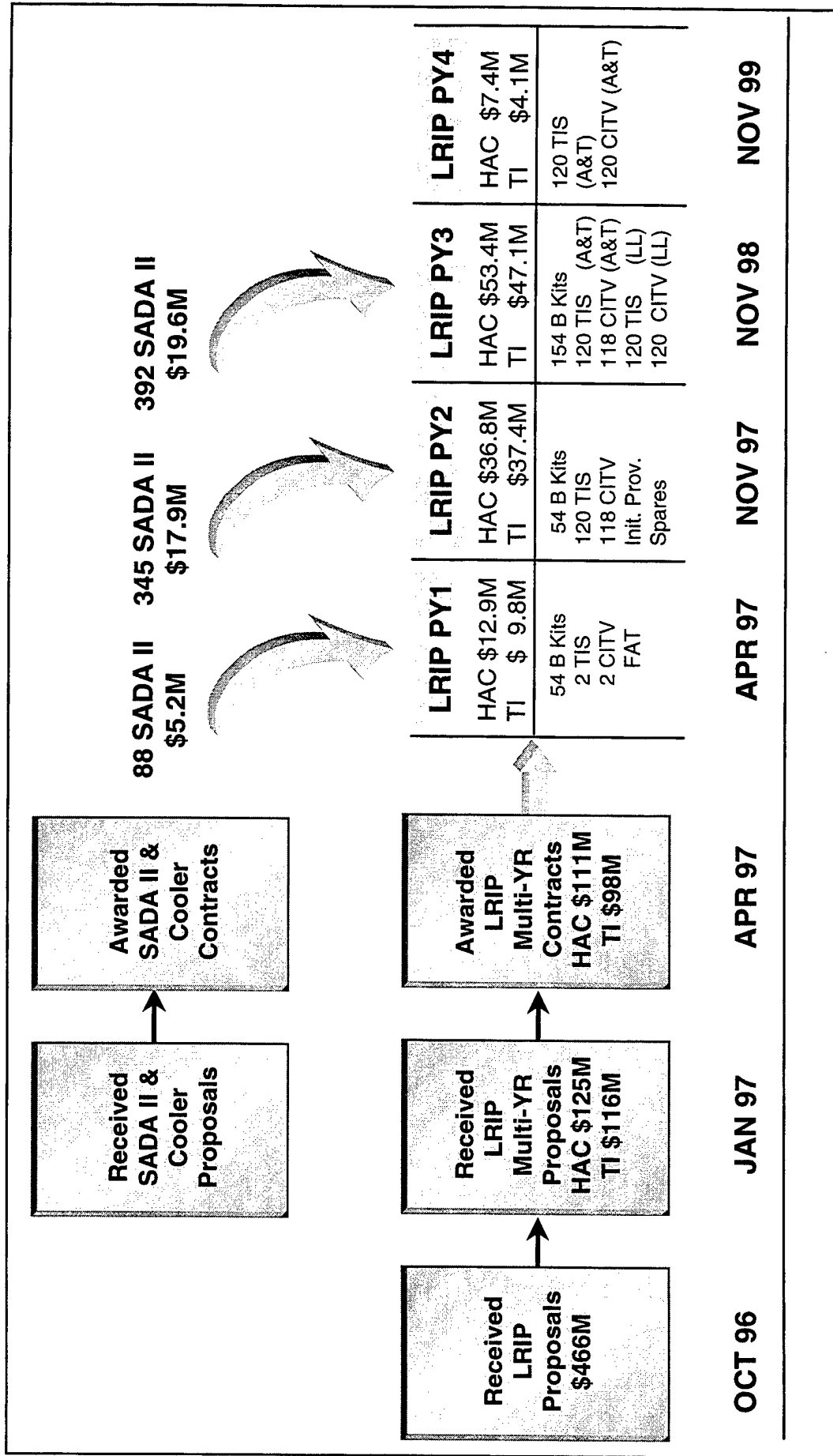
# Horizontal Technology Integration 2nd Generation FLIR Program Production Requirements

Event	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	Total
EMD																		
LRIP																		
FSP																		
Quantity																		
FLIRs																		
Bradley																		1602
Abrams																		1150
LRAS3																		650

As of 24 March 1998

# Horizontal Technology Integration 2nd Generation FLIR

## LRIP Program Contract Structure



# **Horizontal Technology Integration 2nd Generation FLIR Contract Opportunity**

**Title: Standard Advanced Dewar Assembly (SADA) II**

**Objective: Base Qty = 392, Three Option Years**

**Contract Type: Firm Fixed Price**

**Key Milestones: RFP Release - Aug 98  
Contract Award - Dec 98**

**Estimated Value: \$60 - \$80M Including Options**

**Technical POC: John Spadafore (703) 704-3456**

**Acquisition POC: Deborah Gilligan (732) 532-3506**

# **Horizontal Technology Integration 2nd Generation FLIR Contract Opportunity**

**TITLE: HTI 2nd Generation FLIR**

**OBJECTIVE: Approx. 3,300 B-Kits and Systems**

**CONTRACT TYPE: Firm Fixed Price;  
Five-Year Multi Year**

**KEY MILESTONES: RFP Release Jul 99  
Contract Award Dec 99**

**ESTIMATED VALUE: \$800M - \$1B**

**TECHNICAL POC: John Spadafore (703) 704-3456**

**ACQUISITION POC: Deborah Gilligan (732) 532-3506**

# Aviation FLIR

# Aviation FLIR

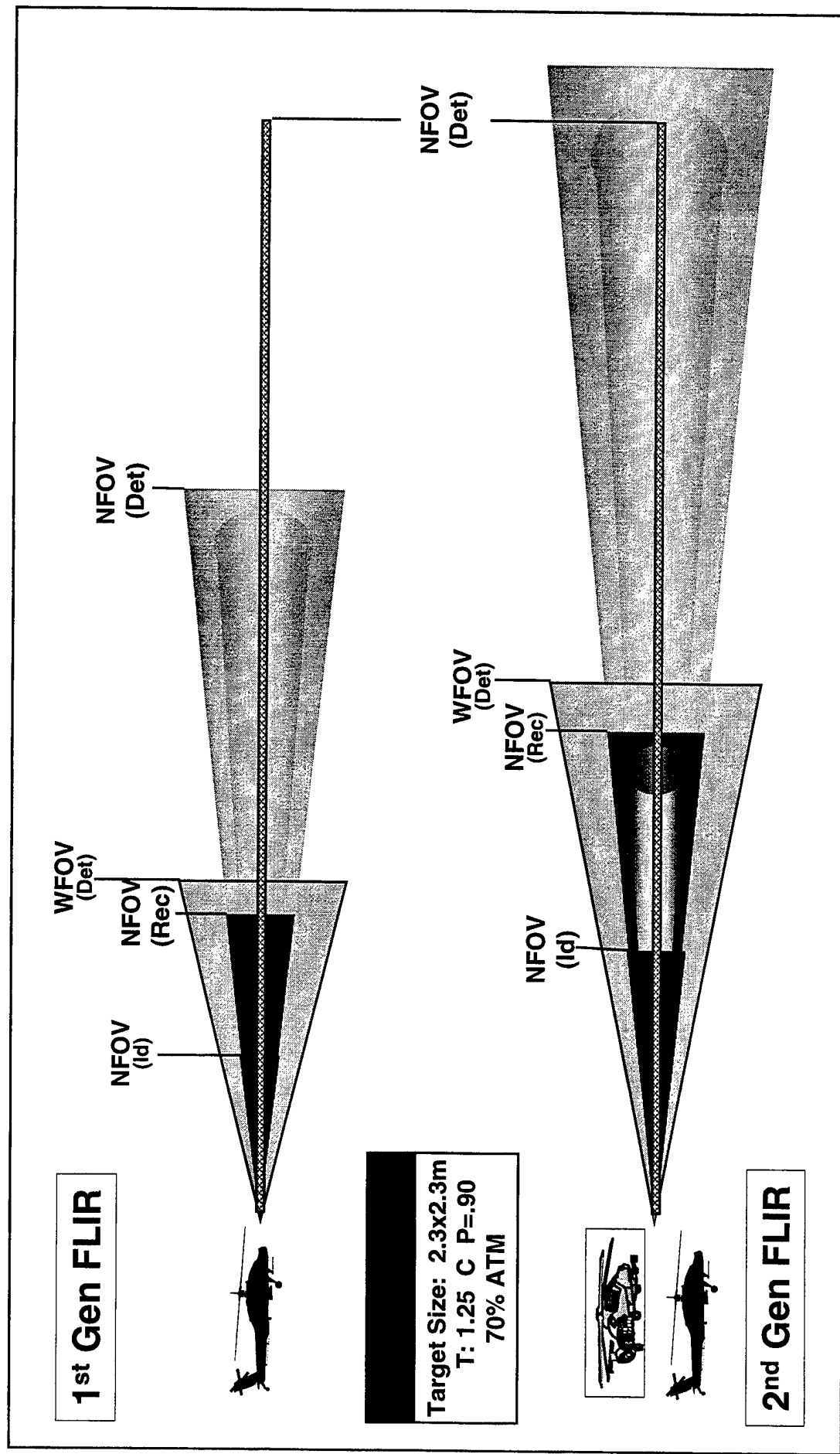


# **Aviation FLIR**

**Aviation FLIR Is an Upgrade on the AH-64 Apache From 1st Gen FLIR Technology to 2nd Gen FLIR. It Improves Pilotage and Targeting Sensors. Improves Target Range, FOV, and Reliability. Sensor Improvement Commensurate With Comanche Performance.**



# Aviation FLIR Battlefield View



## **Aviation FLIR Program Status**

- **EMD Effort Currently Projected to Start FY02**
- **BAA Trade-off Studies Analysis Ongoing**
- **Potential to Be GFE to Apache PVS Contract**
- **Army Continuing Efforts to Accelerate Program**
- **Approved I-FLIR ORD Dated 9 Dec 93**

# **Aviation FLIR Contract Opportunity**

**TITLE: Apache FLIR Upgrade**

**OBJECTIVE: 3 Year EMD**

**CONTRACT TYPE: Cost Plus**

**KEY MILESTONES: Draft RFP FY01**

**ESTIMATED VALUE: \$110M - \$130M**

**POC: LTC Nate Eberle (703) 704-1029**

**CONTRACT OFCR: Deborah Gilligan (732) 532-3506**

# **Aviation FLIR Contract Opportunity**

**TITLE: Apache FLIR Upgrade**

**OBJECTIVE: 3 Year EMD**

**CONTRACT TYPE: Cost Plus**

**KEY MILESTONES: Draft RFP FY01**

**ESTIMATED VALUE: \$110M - \$130M**

**POC: LTC Nate Eberle (703) 704-1029**

**CONTRACT OFCR: Deborah Gilligan (732) 532-3506**



# NOTES

**Project Manager -  
Night Vision/Reconnaissance  
Surveillance and Target Acquisition  
Business Opportunities**

WALZEL/VOAC, Sensor Systems Group, PM-NV/RS-1

UNCLASSIFIED

## POINT PAPER

SFAE-IEW&S-NV

27 April, 1998

SUBJECT: Horizontal Technology Integration of Tactical Laser Systems

OBJECTIVE: An HTI Program that leverages new laser technology and provides performance improvements while saving development time and total life cycle costs.

### FACTS:

- Three Platforms have been identified for acquisition of the HTI Tactical laser:
  - OH58D (Kiowa Warrior)
  - FSCS (Future Scout Cavalry System)
  - AH64D (Longbow Apache)
- Army systems currently use Tactical Lasers for:
  - Range Finding
  - Target Designation
  - Training
  - Target Pointing and Illumination
- The Army leadership supports the concept of an HTI Tactical Laser – PM Night Vision/RSTA was approved as The Army Center of Excellence (ACE) for Tactical Low Energy Lasers in February 1998.
- Milestones:
  - Conduct AH64D Demo with the HTI Tactical Laser      1QFY00
  - EMD Contract Award      2QFY00
- This will be a cost plus development contract with a low rate initial production option. It is planned to run for approximately three years.

BRIEFER: MAJOR Kel Wood, Assistant Product Manager Sensor Systems, PM NV/RSTA  
(703) 704-3470.

S/For/Joni Forman, DPM  
Jeffrey A. Sorenson  
Colonel, US Army  
Project Manager  
Reconnaissance, Surveillance &  
Target Acquisition

## POINT PAPER

SFAE-IEW&S-NV

27 April, 1998

SUBJECT: Profiler

OBJECTIVE: Profiler is a modification to the AN/TMQ-41 Meteorological Measuring Set (MMS) consisting of a suite of meteorological sensors and software/models that will provide the field artillery with current or expected weather conditions out to a range of 500 kms. It will eliminate the "Balloon from the Battlefield". Models include computer Assisted Artillery Meteorology (CAAM) and Battlescale Forecast Model (BFM) and a meteorological Satellite Receiver.

### FACTS:

- EMD program planned to start in FY00.
- BAA trade-off studies ongoing.
- Computer assisted artillery Meteorology Model being fielded as upgrade to AN/TMQ-41.
- Battlescale Forecast Model is in advanced development.
- Proof of concept prototype developed by Army Research Laboratory.
- Milestones:
  - Release Draft RFP            3QFY99
  - EMD Contract Award        2QFY00
- This will be a cost plus development contract. It is planned to run for approximately three years.

BRIEFER: MAJOR Kel Wood, Assistant Product Manager Sensor Systems, PM NV/RSTA (703) 704-3470.

S/For/Joni Forman, DPM  
Jeffrey A. Sorenson  
Colonel, US Army  
Project Manager  
Reconnaissance, Surveillance &  
Target Acquisition



## POINT PAPER

SFAE-IEW&S-NV

27 April, 1998

SUBJECT: Lightweight Video Reconnaissance System (LVRS)

OBJECTIVE: The outstation is a small ruggedized processor and video camcorder with night vision capability unit that gives the scout ability to conduct reconnaissance, Battle Damage Assessment (BDA), save, send and receive images. It is lightweight and does not degrade the scout's mobility.

### FACTS:

- Currently in production.
- First unit equipped: 75<sup>th</sup> Ranger Regiment.
- Congressional Plus-up - \$2M in FY98.
- Milestones:
  - RFP Issued 1QFY00
  - Contract Award 2QFY00
- This will be a Firm-Fixed-Price production, consisting of a Base Year and three option years. Approximately 80 Base station and 200 Out stations will be produced.

BRIEFER: MAJOR Kel Wood, Assistant Product Manager, Sensor Systems, PM NV/RSTA  
(703) 704-3470.

S/For/Joni Forman, DPM  
Jeffrey A. Sorenson  
Colonel, US Army  
Project Manager  
Reconnaissance, Surveillance &  
Target Acquisition

## POINT PAPER

SFAE-IEW&S-NV

27 April, 1998

SUBJECT: Lightweight Laser Designator Rangefinder (LLDR)

OBJECTIVE: LLDR provides the Army Light Forces Forward Observers (FOs), Bradley Fire Integration Support Teams (BFIST), and USMC Forward Observers/Forward Area Controllers (FO/FACs) with an all weather, day/night target observation, location and designation system.

### FACTS:

- Engineering Manufacturing Development (EMD) contract signed with Litton Laser Systems on 31 Jul 97
- Warfighter Rapid Acquisition Program (WRAP) approval received 28 Jul 97
- Deliveries include 10 EMD and 20 WRAP units
- Preliminary Design Review completed on 16 Jan 98
- Milestones:
  - Milestone III 1QFY00
  - Production Decision 1QFY00
  - FUE 3QFY01
- This will be a Firm-Fixed-Price/Multi-Year procurement. The contract is planned to run four years and produce between 175 – 400 systems.

BRIEFER: MAJOR Kel Wood, Assistant Product Manager, Sensor Systems, PM NV/RSTA (703) 704-3470.

S/For/Joni Forman, DPM  
Jeffrey A. Sorenson  
Colonel, US Army  
Project Manager  
Reconnaissance, Surveillance &  
Target Acquisition

# **AGENDA**

- **HTI Tactical Laser**
- **Profiler**
- **LVRS**
- **LLDR**



# **Horizontal Technology Integration of Tactical Laser Systems**

# **Horizontal Technology Integration of Tactical Laser Systems**

- **An HTI Program That Leverages New Laser Technology and Provides Performance Improvements While Saving Development Time and Total Life Cycle Costs; Accomplished by Designing Tactical Lasers in a Modular Fashion With Common Reconfigurable Modules Using an Open Architecture Approach**
- **To Date, Three Platforms Have Been Identified for Acquisition of the HTI Tactical Laser:**
  - **AH64D (Longbow Apache)**
  - **OH58D (Kiowa Warrior)**
  - **FSCS (Future Scout Cavalry System)**

# **Horizontal Technology Integration of Tactical Laser Systems HTI Laser System Description**

## **Army Systems Currently Use Tactical Lasers For:**

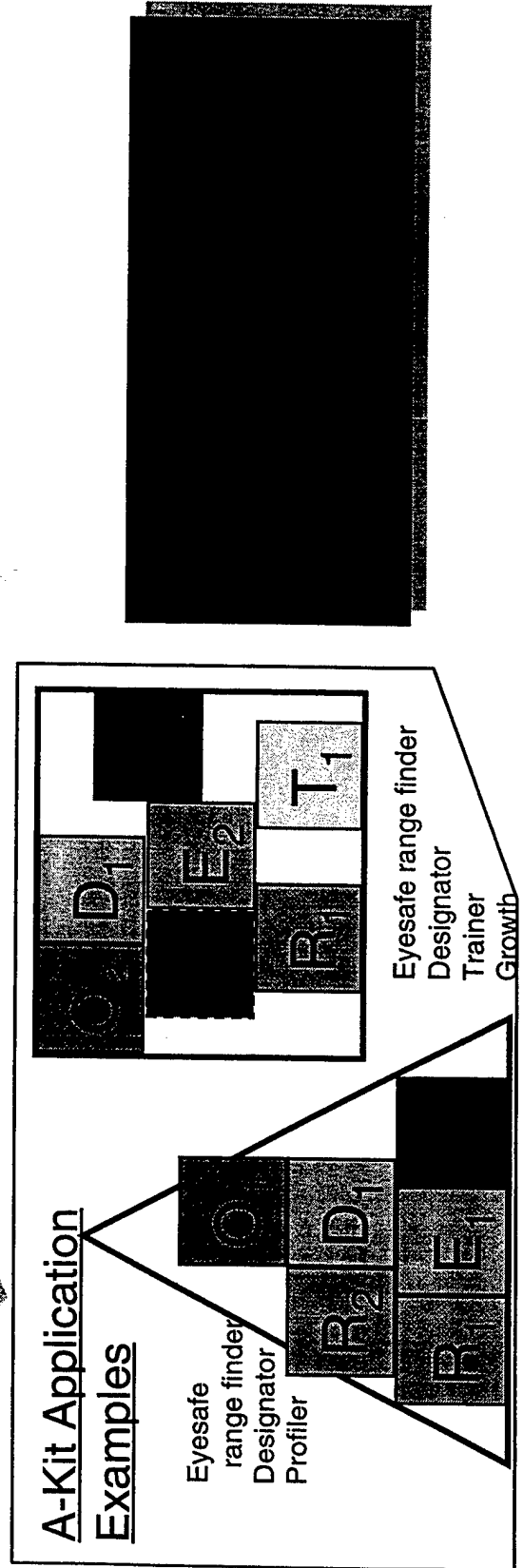
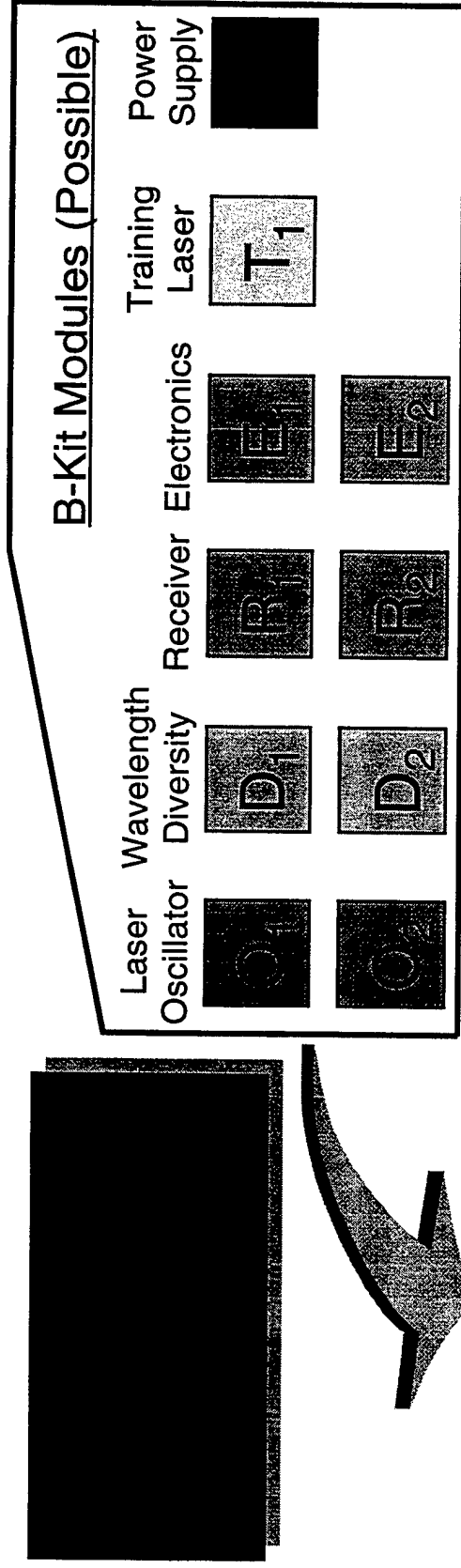
- Range Finding**
- Target Designation**
- Training**
- Target Pointing and Illumination**

# **Horizontal Technology Integration of Tactical Laser Systems**

## **HTI Laser System Description (Cont.)**

- **Subsequent Capabilities to Be Considered Include:**
  - **Combat and Target Identification**
  - **Threat Missile Countermeasures**
  - **Weapon Guidance**
  - **Optical/Electro-Optical Detection**
  - **Obstacle Detection and Avoidance**
  - **Counter Sensor and Counter Sniper**
  - **Secure Communications**
  - **Meteorological**
  - **Chemical and Biological Agent Detection**

# Horizontal Technology Integration of Tactical Laser Systems





# **Horizontal Technology Integration of Tactical Laser Systems Program Status**

- **Contractor Trade Studies (1997) From Three Different Contractors Support the HTI Tactical Laser Concept**
- **The Army Leadership Supports the Concept of an HTI Tactical Laser - Approved Army Center of Excellence (ACE) for Tactical Low Energy Lasers in Feb 98**

# **Horizontal Technology Integration of Tactical Laser Systems Milestones**

- 2QFY98    Approval as an HTI Program**
- 2QFY98    Charter Approved for  
Establishment of Army Center of  
Excellence for Tactical Low  
Energy Lasers**
- 1QFY00    Conduct AH64D Demo With the  
HTI Tactical Laser**

# **Horizontal Technology Integration of Tactical Laser Systems Milestones (Cont.)**

- 2QFY00 Milestone I/II Decision to Enter EMD**
- 2QFY00 EMD Contract Award**
- 2QFY03 Milestone III Decision to Support  
Full Rate Production. (1,800  
systems)**

# **Horizontal Technology Integration of Tactical Laser Systems Program Requirements**

- **EMD Program Will Develop Modules and Systems for FSCS, AH64D and OH58D That Meet Existing Interface Requirements to Include Volume, Weight and Power, and the Following Performance Requirements**
  - **Eyesafe Range Finding      10 Kms**
  - **Target Designation            8 Kms**
  - **Engagement Training        6 Kms**

# **Horizontal Technology Integration of Tactical Laser Systems Program Requirements (Cont.)**

- **All Qualification Testing Will Be Included**
- **A Formal Definition of the Architecture and Performance Specs for All Common Modules Will Be Developed**
- **Future Abrams and Bradley Upgrades Will Be Monitored for Possible Insertion of the HTI Tactical Laser and May Be Included As Virtual Design Work Under EMD**

**Horizontal Technology Integration of Tactical  
Laser Systems  
Contract Opportunity**

**TITLE:** Horizontal Technology Integration of Tactical Laser

**OBJECTIVE:** EMD + LRIP Option

**CONTRACT TYPE:** Cost Plus

**KEY MILESTONES:** 2QFY00 EMD Contract Award

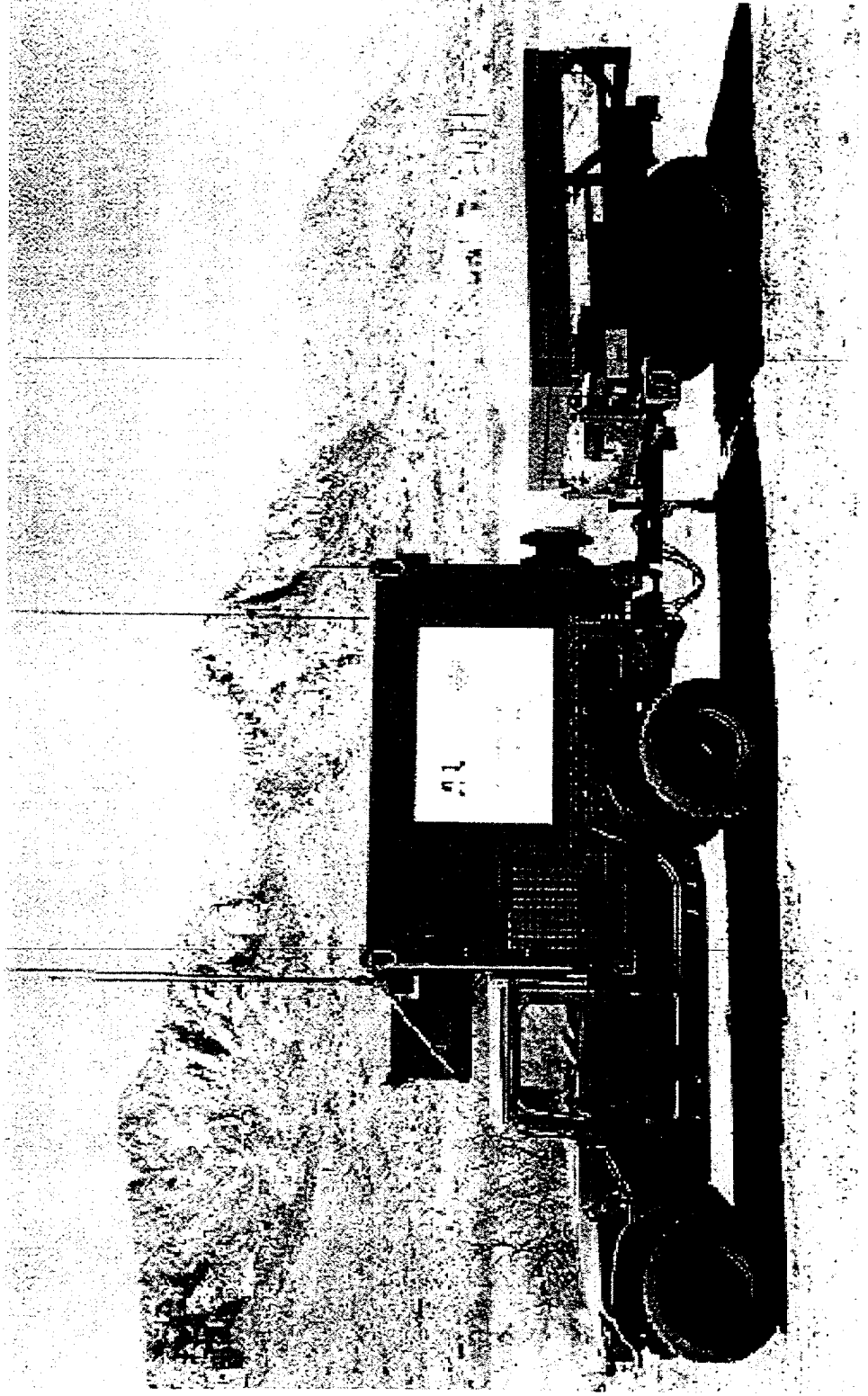
**ESTIMATED VALUE:** \$41M - \$53M

**POC:** William Smith (703) 704-3478

**CONTRACT OFCR:** Estelle Klose

# Profiler

# Profiler





## **Profiler**

**Profiler is a Modification to the AN/TMQ-41 Meteorological Measuring Set (MMS) Consisting of a Suite of Met Sensors and Software/Models that will Provide the Field Artillery with Current or Expected Weather Conditions Out to A Range Of 500 Kms.**

**It will Eliminate the “Balloon from the Battlefield”. Models Include Computer Assisted Artillery Meteorology (CAAM) and Battlescale Forecast Model (BFM) and a Meteorological Satellite Receiver.**

## **Profiler Program Status**

- **BAA Trade-off Studies Ongoing**
- **Computer Assisted Artillery Meteorology Model Being Fielded as Upgrade to AN/TMQ-41**
- **Battlescale Forecast Model is in Advanced Development**
- **Satellite Capability Undetermined**
- **Proof of Concept Prototype Developed by Army Research Laboratory**
- **EMD Program to Start in FY00**

# **Profiler**

## **System Requirements**

- **The Contractor Shall Develop And/or Integrate a Meteorological Sensor Suite Which Shall Include Weather Forecasting Software, Meteorological Satellite Data Receiver, Surface Sensor, Radiometer, and Wind Radar.**
  - **Government Furnished Weather Forecasting Software Will Be Made Available to the Contractor If Desired.**
- **The Contractor Shall Develop Connectivity Between the Profiler Sensor Suite and the Currently Fielded AN-TMQ41 Meteorological Measuring Set.”**

# **Profiler**

## **System Requirements (Cont.)**

- **Use Army Battle Command System Common Hardware**
- **Interface With AFATDS/compatible with JTA-A, IMETS**
- **Provide Target Area Met Out to 500 Km via Battlescale Forecast Model**
- **Provide Improved Met Data/Messages Every 30 Minutes**
- **Eliminate Balloon, Reduce Crew Personnel**

# **Profiler**

## **Contract Opportunity**

- **TITLE: Profiler**
- **OBJECTIVE: EMD**
- **CONTRACT TYPE: Cost Plus**
- **KEY MILESTONES: 3QFY99 Release Draft RFP  
2QFY00 EMD Contract Award**
- **ESTIMATED VALUE: \$10M - \$12M**
- **PROJECT LEADER: MAJ Kel Wood (703) 704-3470**
- **CONTRACT OFCR: Estelle Klose**

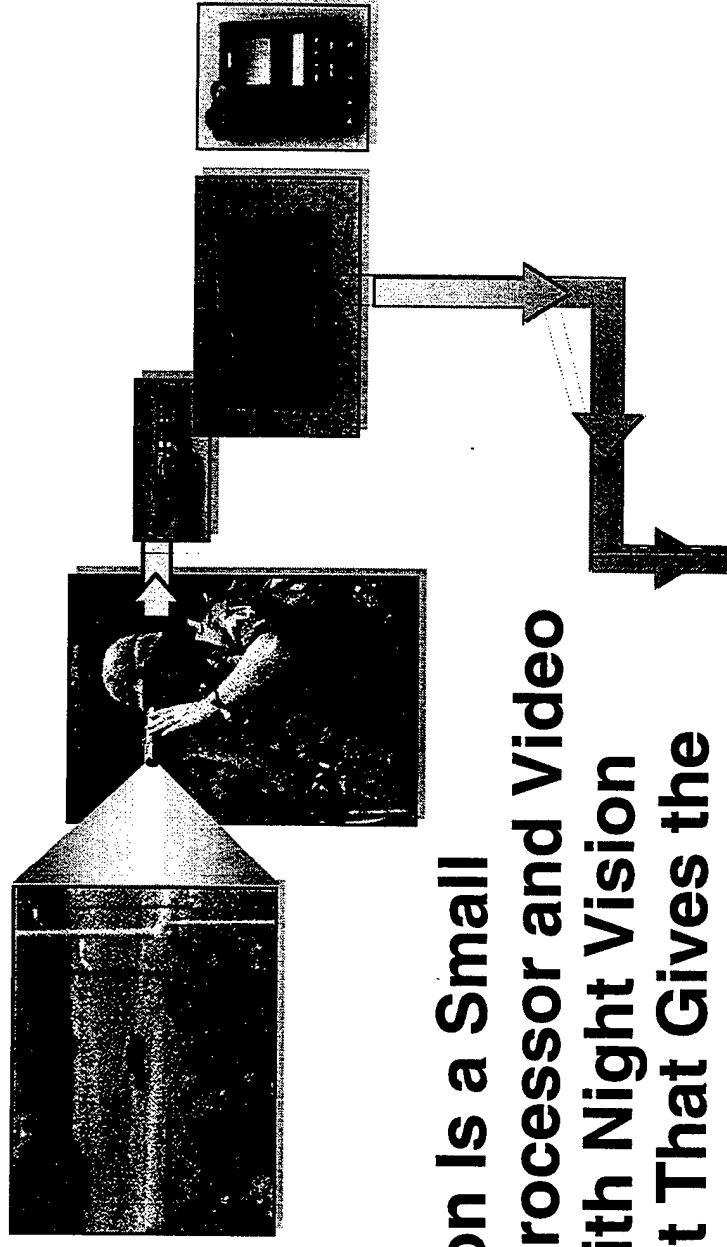


# **Lightweight Video Reconnaissance System (LVRS)**

# **Lightweight Video Reconnaissance System (LVRS)**

**The Lightweight Video Reconnaissance System (LVRS), AN/PVH-1 & 2 Consists of a Man-portable Out Station and a Transportable Base Station. Imagery Is Captured by the Out Station, Compressed and Transmitted to the Base Station Over Existing Tactical Communication Channels.**

# Lightweight Video Reconnaissance System (LVRS) System Description



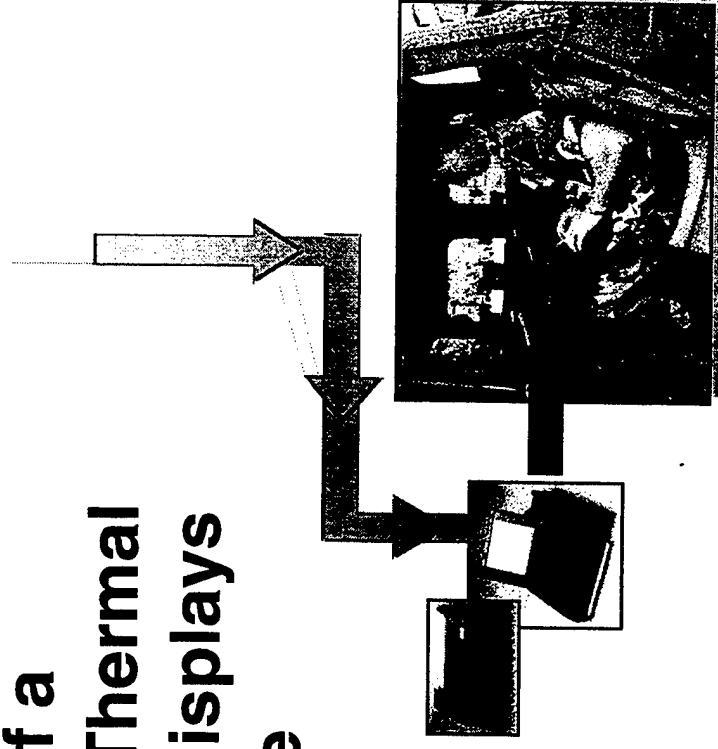
**The Out Station Is a Small Ruggedized Processor and Video Camcorder With Night Vision Capability Unit That Gives the Scout the Ability to Conduct Reconnaissance, Battle Damage Assessment (BDA), Save, Send and Receive Images. It Is Lightweight and Does Not Degrade the Scout's Mobility.**



# **Lightweight Video Reconnaissance System (LVRS)**

## **System Description (Cont.)**

**The Base Station Consists of a Ruggedized Processor and Thermal Printer which receives and displays imagery transmitted from the Out Stations. The system operator has the ability to print imagery, and transmit imagery to other Base Stations and battlefield information systems.**



**Lightweight Video Reconnaissance System  
(LVRS)  
Milestones**

- **2QFY94**      **Simplified Operational Requirement Document (SORD)**
- **4QFY95**      **Contract Award**
- **4QFY97**      **Type Classified: Standard**
- **3QFY98**      **Proposed Material Release**

# **Lightweight Video Reconnaissance System (LVRS) Status**

- **Currently in Production**
- **First Unit Equipped: 75<sup>th</sup> Ranger Regiment**
- **Congressional Plus-up - \$2M in FY98**

# **Lightweight Video Reconnaissance System (LVRS) System Requirements**

- **Target Acquisition:**      **Day: 1500 meters**  
   **Night: 500 meters**
- **Out Station Weight:**      **16 pounds**  
   *(currently 8.8 pounds w/batteries)*
- **Single Frame Transmission <40 seconds**
- **Ruggedization:**      **Limited Environmental**

# Lightweight Video Reconnaissance System (LVRS) Contract Opportunity

**TITLE:** Lightweight Video Reconnaissance System

**OBJECTIVE:** Production: 80 Base Stations  
200 Out Stations

**CONTRACT TYPE:** Fixed Price: Base Year +  
3 Option Years

**KEY MILESTONES:** RFP Issued: 1QFY00  
Contract Award: 2QFY00

**ESTIMATED VALUE:** \$5M - \$10M

**POC:** Jaime Gonzalez (703) 704-3212

**CONTRACT OFCR:** Jack Kulaga (732) 427-1356



# **Lightweight Laser Designator Rangefinder (LLDR)**

# Lightweight Laser Designator Rangefinder (LLDR)



# **Lightweight Laser Designator Rangefinder (LLDR)**

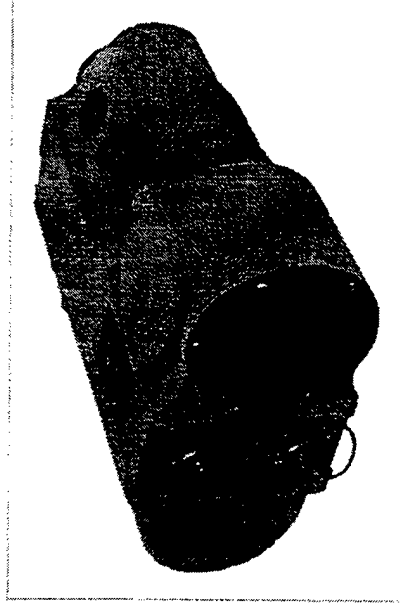
**LLDR Provides the Army Light Forces  
Forward Observers (FOs), Bradley Fire  
Integration Support Teams (BFIST), and  
USMC Forward Observers/Forward Area  
Controllers (FO/FACs) With An All Weather,  
Day/Night Target Observation, Location,  
and Designation System**



# **Lightweight Laser Designator Rangefinder (LLDR)**

## **System Components**

- **Target Locator Module (TLM)**
  - **Day Sight; Night Sight**
  - **Image / Data Display**
  - **Eyesafe Laser Rangefinder**
  - **Azimuth / Vertical Angle Measurement**
  - **Imagery / Digital Data Port**
  - **Global Positioning System**



# **Lightweight Laser Designator Rangefinder (LLDR) System Components (Cont.)**

- **Laser Designation Module (LDM)**
  - Designation Laser
  - Optics
  - Cooling System
- **Interface Cable**
- **Tripod**
- **Battery**



# **Lightweight Laser Designator Rangefinder (LLDR) Status**

- **Engineering Manufacturing & Development  
(EMD) Contract signed with Litton Laser  
Systems on 31 Jul 97**
- **Warfighter Rapid Acquisition Program (WRAP)  
Approval Received 28 Jul 97**
- **Deliveries include 10 EMD and 20 WRAP Units**
- **Preliminary Design Review completed on  
16 Jan 98**

# **Lightweight Laser Designator Rangefinder (LLDR) Milestones**

- **Critical Design Review Jun 98**
- **Independent Operational Test & Evaluation  
Jun - Sep 99**
- **Milestone III 1QFY00**
- **FUE 3QFY01**

# **Lightweight Laser Designator Rangefinder (LLDR) Program Requirements**

- **Manportable; Not To Exceed 35 lbs**
- **Range (Vehicle Recognition)  
... 7,000 M Day  
... 2,500 M Night**
- **80 M Circular Error Probability (CEP) at 10 Km**
- **Eyesafe Laser Rangefinder (100-20,000 meters)**
- **Data and Image Export**

# **Lightweight Laser Designator Rangefinder (LLDR) Program Requirements (Cont.)**

- Band I, II and A-code Designator  
Compatible**

- Designation Ranges**

  - ...  $\geq$  5 km (stationary target)**

  - ...  $\geq$  3 km (moving target)**

- Stabilized Tripod Tracking Head**

# **Lightweight Laser Designator Rangefinder (LLDR) Competition**

- **The Government's Intent Is to Award the Production Contract to the EMD Winner (Litton Laser) Providing the Average Unit Production Price (AUPP) Target, and Key Performance Parameters Are Met**
- **AUPP Target \$142K in Quantity of 400 in FY00 Dollars**
- **If Targets Are Not Met, the Government Will Open the Competition**
- **Should Another Source Be Identified That Possess Working Hardware Which Meets the LLDR Performance Requirements and AUPP Target, Competition Will Be Full and Open**
- **Any Sole Source Approach Would Have to Be Supported by All Relevant Regulations and Statutes in Effect at the Time of the Production Award**

**Lightweight Laser Designator Rangefinder  
(LLDR)  
Contract Opportunity**

**TITLE:** Lightweight Laser Designator Rangefinder  
(LLDR), AN/PED-1

**OBJECTIVE:** 175 - 400 Systems FY00 - FY03

**CONTRACT TYPE:** Fixed Price / Multi-year

**AUPP TARGET:** \$142K in Qty 400 in FY00 \$\$

**KEY MILESTONES:** Production Decision 1QFY00

**MILESTONE III:** 1QFY00

**ESTIMATED VALUE:** \$40M - \$70M

**PROJECT LEADER:** William T. Thodos (703) 704-1202

**CONTRACT OFCR:** Jack Kulaga (732) 427-1356





# NOTES

# SESSION VI

# PEO C3S Overview



**Robert R. Lehnes**  
Deputy Program Executive Officer  
Command, Control and Communications Systems

UNCLASSIFIED

## POINT PAPER

SUBJECT: All Source Analysis System (ASAS) Block III

OBJECTIVE: ASAS is a tactically deployable system which receives and correlates data from national, theater, joint and tactical intelligence sensors and sources; produces ground battle situation displays; rapidly disseminates intelligence information; provides target nominations; helps to manage organic Intelligence Electronic Warfare (IEW) assets; and assists in providing OPSEC support. The ASAS is located in the Military Intelligence elements which support the Intelligence Officers (J-2, G-2, S-2) at EAC, Corps, Division, Separate Brigade and Armored Cavalry Regiment and maneuver brigades and battalions. The ASAS provides the Army with a seamless intelligence fusion architecture from EAC down to Battalion S2 workstations. As the IEW subsystem of the Army Battle Command System (ABCS), ASAS provides all source intelligence fusion which allows commanders and their staffs to gain a timely and comprehensive understanding of enemy deployments, capabilities, and potential courses of action.

## FACTS:

- The ASAS Block III delivers the Objective Analysis and Control Element (ACE).
- ASAS Block III significantly enhances both the intelligence fusion capabilities and the ABCS digitized force interoperability of the fielded Block II systems and is primarily a software enhancement effort. Major functionality development areas are: IMINT, CI/HUMINT, OPSEC, EW/ECM, upgrade of automated intelligence correlation and fusion, integrated collection management, and virtual TOC, Jump/Split Base capability
- ASAS Block III does not have a hardware contract effort per se but is primarily the assembly and integration of NDI and GFE, the majority of which are common hardware products, along with supporting efforts required to field the force. Workstations and communications upgrades will be performed to maintain consistency with emerging technology.
- The Army will award one competitive incremental delivery contract. The contractor will build upon the Block II system with three incremental drops/deliveries of enhancement approximately annually.

RFP Release: 2QFY99

Award: 4QFY00

- The contract will be a cost plus level of effort or cost plus incentive fee contract and will be awarded through a best value evaluation process. Expected contract duration is 60 months.

13 April 98

## POINT PAPER

SUBJECT: Single Channel Anti-jam Manportable (SCAMP) Block II Terminal

Objective: The Block II SCAMP is the lightweight Milstar manportable single channel satellite terminal. It will provide the Army and Special Operations Forces worldwide secure voice and data communications capability with low probability of detection/interception. It will also operate with the Advanced EHF Satellite System.

## FACTS:

- The Block II SCAMP is the objective manportable Milstar terminal
- Engineering Feasibility Efforts to prove the feasibility of a lightweight (12-15 lb.) manportable Milstar terminal will conclude in 2-4QFY00 with prototype demonstrations with Lincoln Laboratory. The demonstrations will support a Milestone II decision in 1QFY01.
- The Army will award up to two competitive Spiral Development contracts. The contractors will each develop, manufacture and test 20 EMD/LRIP SCAMP Block II terminals. The schedule is as follows:

RFP Release: 4QFY00  
Award: 2QFY01

- The contracts will be cost plus type contracts and will be awarded through a best value evaluation process. Expected contract duration is approximately 30 months.

## BRIEFER:

7 April 98

**Point Paper****SUBJECT:** Global Command and Control System – Army (GCCS-A)

**OBJECTIVE:** GCCS-A is the Army complement to the Joint Global Command and Control System, focusing at the Army specific applications dealing with strategic and theater levels of command. The system is structured to meet the combined requirements of the Army Battle Command System and the GCCS.

GCCS-A systems development and integration is targeted toward implementing the Joint Technical Architecture (JTA) and the Defense Information Infrastructure Common Operating Environment (DII COE).

**FACTS:**

GCCS-A is a single, seamless command and control system, and will be built around the JTA and the DII COE. It requires interoperability with the GCCS. It will be designed to ensure software and technology reuse and to eliminate or reduce duplication among other Command and Control Systems.

GCCS-A will be developed incrementally. The length of time between software deliveries will be based on the functionality incorporated into each specific delivery, the length of delivery period, and the resources applied to the effort. Each development cycle will be based on an evolutionary prototyping approach.

Milestones listed below reflect the planned schedule for the GCCS-A.

Draft RFP Release	2 <sup>nd</sup> Qtr 99
RFP Release	3 <sup>rd</sup> Qtr 99
Contract Award	2 <sup>nd</sup> Qtr 00

This will be a Cost Plus Award Fee based procurement. Award will be based on Best Value provided to the Government to a single contractor. The contract period will be the base period plus 4 option years.

**BRIEFER:** MAJ Catherine McNerney, Technical Management Director, PMO STCCS, (703) 806-6495.

Product Manager  
LTC Charles McMaster  
Global Command and Control System - Army  
(703) 806-6409

# **Outline**

- **First Digitized Division (FDD)**
- **Integrated Data Environment (IDE)**
- **Contract Opportunities**
  - **All Source Analysis System (ASAS) Block III**
  - **Global Command and Control System - Army (GCCS-A)**
  - **Single Channel Anti-jam Manportable Terminal (SCAMP) Block II**

# First Digitized Division (FDD)



# A Process to Revolutionize Land Combat



*Just Cause*



*Desert Storm*



*Provide Comfort*

**Force XXI  
Operations**

Digitized AWE  
NTC 94-07

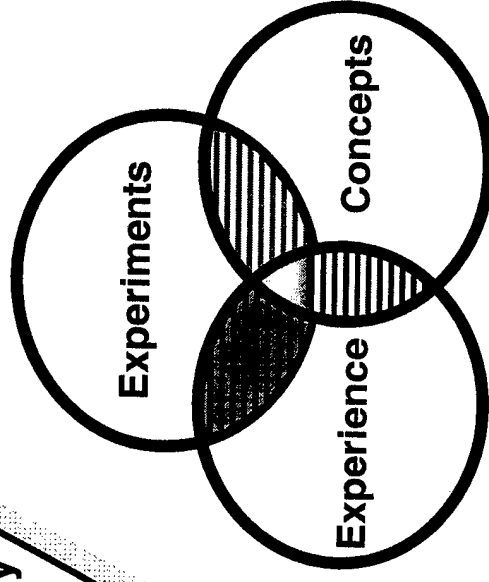
Restore Hope

Restore Democracy  
Atlantic Resolve 94

Mobile Strike Force  
Warrior Focus  
JRTC 96-02

Able Sentry  
TMD 95 &  
Strong Safety

Focused Dispatch AWE



***Initial Glimmerings  
that Battle  
is Changing***

***An Integrated Approach...***

***"Land Combat in the 21st Century: TRADOC"***

# C3I Architecture Responsibilities

**Army SA  
DISC4**

## SIGCEN SA-C Lead

Primary proponent for :

- Requirements
- Doctrine
- Force structure
- System #s & locations

Processes include :

Op Arch, C4RDP, TO&E, DCD visits, OPFAC boards, & IERs

## PEO C3S SA-D Lead

Primary proponent for :

- Implementation details
- Technical assessments
- Resource constraints
- Detailed analyses

Processes include:

IPTs, PEO/PM reviews, CTSF, TI and TOC data design,

Tech Arch

---

Both are responsible for coordinating these changes with a broad set of stakeholders.

*Regardless Of Maturity (SA-C or D) - Each organization coordinates changes within its own area of responsibility, then submits SACPs to DA for consideration.*

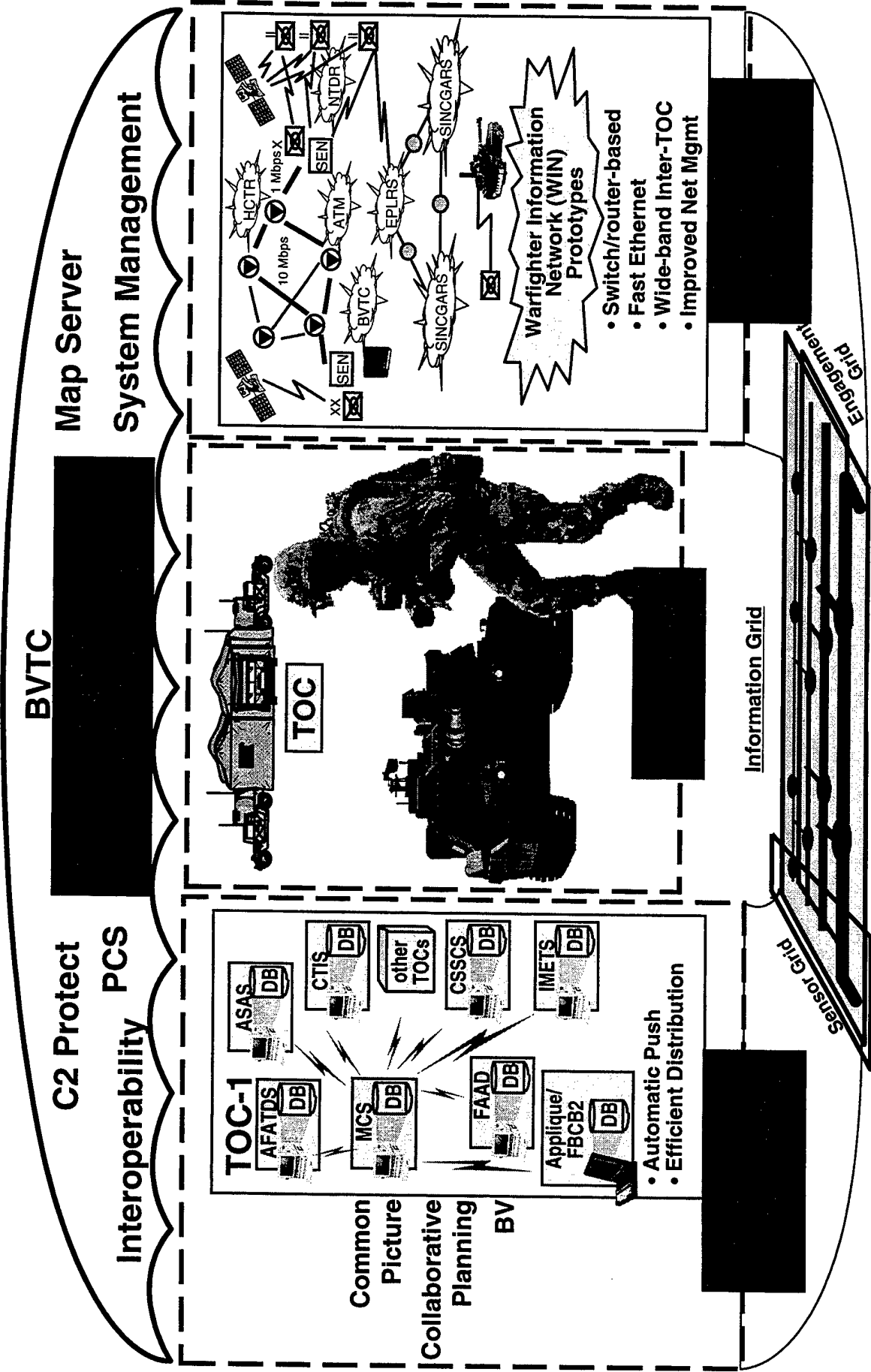
# PEO C3S Process (Initiated Sep 1997)

SoS evolutionary development and fielding

- Spiral Model/CTSF

- Tech Insertion

- IPTs



# Making the System-of-Systems Go-To-War



**Task  
Re-Org**

**Ops-Flexibility**

**Joint/Combined**

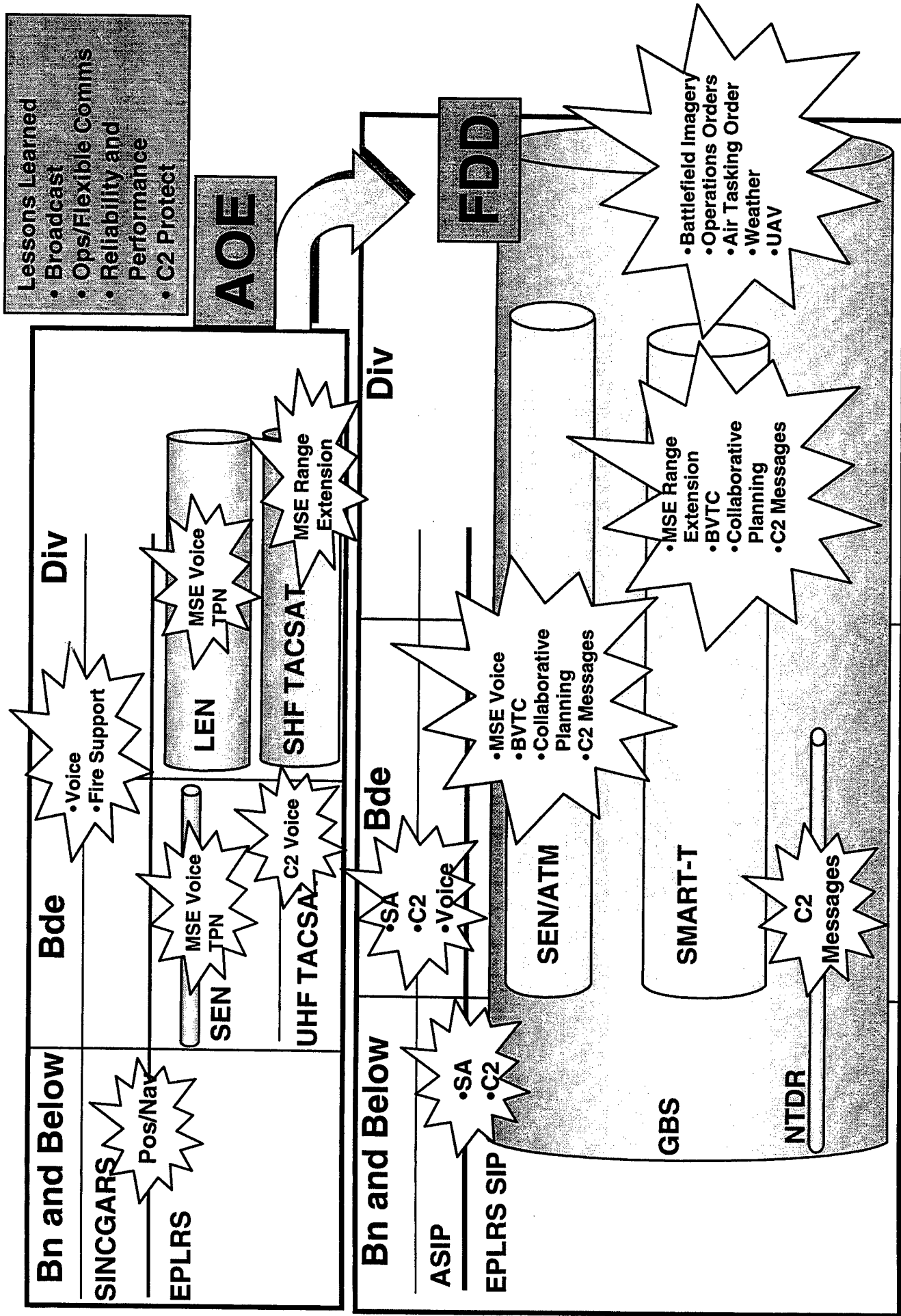
**Security**

- AWE Priorities**
1. Functionality
  2. Interoperable
  3. Go-to-War

**Change of  
Priorities**

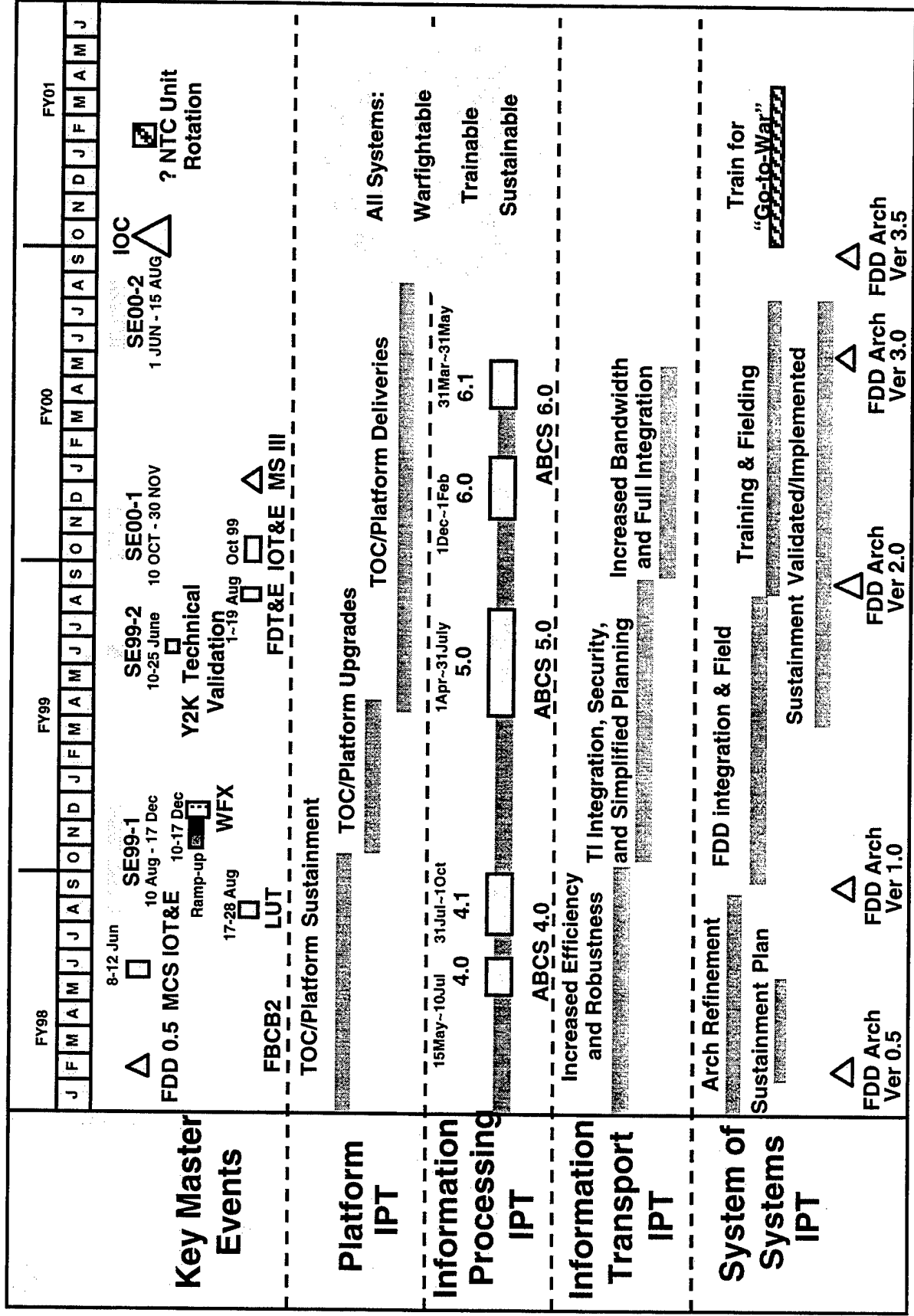
- FDD Priorities**
1. Go-to-War
  2. Interoperable
  3. Functionality

# FDD Communications View



# Master FDD Schedule

## Version 1.0





# **Integrated Data Environment (IDE)**

# PEO C3S's Integrated Data Environment (IDE) Strategy



PROGRAM EXECUTIVE OFFICE  
COMMAND, CONTROL  
AND COMMUNICATIONS SYSTEMS

## PEO C3S Vision:

An integrated digitized PEO for business & operations processes that provides world-class development, fielding and support to the Integrated Digitized Battlefield

Implementation

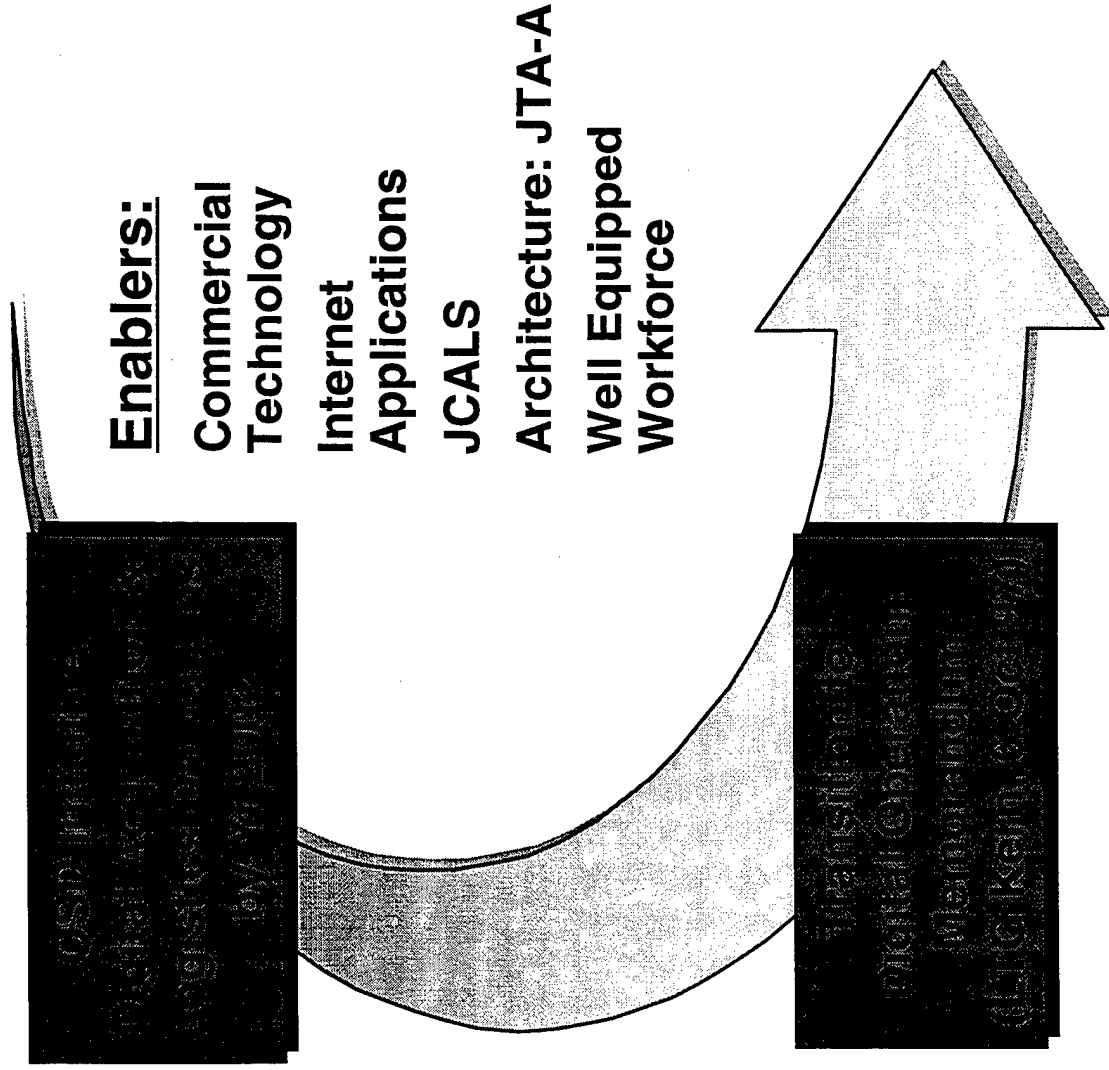
- Work with CSA's Army Knowledge Office Project
- Prototype PEO for Public Key Infrastructure for the Army

## IDE Strategic Objectives:

- Real Time Information for decision making
- Create information solutions for the "Road Warrior"
- Automate internal PEO Business processes
- Develop information channels to the War Fighter
- Initiate Process Innovation for increased effectiveness



# PEO C3S: Leader in Implementing an Integrated Data Environment (IDE)



## Enablers:

Commercial  
Technology

Internet  
Applications

JCALS

Architecture: JTA-A

Well Equipped  
Workforce

## PEO C3S Initiatives

Pilot Paperless ASARC

The Army's Secure Email  
Prototype

Internet Information Channel  
to the User

World Class Desktop and  
Office VTC Capabilities

Telecommuting Center for the  
Road Warrior

Interactive Technical  
Collaboration Sites

Source for Automated  
Integrated Scheduling and  
Planning for FDD

Electronic Tracking,  
Suspense & Filing

Secure Websites

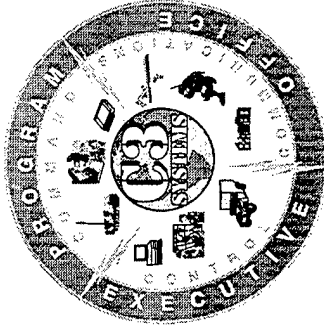
## Functionality & Features:

- Information Exchange
- Collaboration
- Interactive
- Secure:
  - Secure Socket Layer
  - Password
  - Authentication
  - Encryption
  - Encrypted Access Paths

## • Work Flow

Actual  
PEO C3S  
Information  
Operation  
Center

PEO C3S Information Operation Center







**Alerts**  
2/28/59

A Successful Integrated Data Environment (IDE) Will Be  
Critical to the Success of This Organization  
- Brigadier General Steven W. Boutelle

**Need Help/Support**  
**Call 1-888-XXX-XXXX**

"Point & Click  
Desired Application"

			
<b>Operations</b> PEO Directives Master Schedule Front Office Calendar(s) Upcoming Meetings/Events Standard Briefing Charts Briefing Archive Correspondence, Suspense Tracking	<b>Reference</b> Document Library PEO Policies PEO Lesson Learned/Succe ss Stories PEO Community Telephone/Em il Directory POC Directory Rolindex (Outside Phone/Email & Addresses)	<b>Work Groups</b> PEO Forum, Topic Discussion Group Private Groups: (Restricted) IDE IPT PEO/PM Mgmt	<b>Project Specific</b> Force XXI Integration Office TF XXI Division XXI Army System Architecture FDD Fort Hood Configuration Mgmt Office HTI C2SIP RFPI Y2K

## Applications Include:

- Briefings
- Action Items
- Suspenses
- Discussion Groups
- Lessons Learned
- Document
- Reference
- Master Schedules



# Contract Opportunities



# **All Source Analysis System (ASAS) Block III**

# **System Description**

- **Operates as the Intelligence and Electronic Warfare (IEW) component of the Army Battle Command Systems from battalion through echelons above corps (EAC)**
- **Supports the Warfighter's battle management by rapidly processing and correlating large volumes of intelligence information from various sources**
- **Operates in any theater across the spectrum of conflict**
- **Supports Joint Task Forces and Special Operations Forces elements from sanctuary by using Deployable Intelligence Support Elements (DISE)**

# **Status of Program**

- **ASAS Block I is fielded to 12 Priority Units with a Commercial Variant (ASAS-Extended) Fielded to the Remainder of the Active Force and 15 National Guard Brigades**
- **ASAS Block II in Engineering and Manufacturing Development Phase with a Milestone III Fielding Decision scheduled May 2000**
- **ASAS Block III is Scheduled for a Milestone II Decision in 4QFY00 with a Contract Award in August 2000. The Request for Proposal Should be Released 2QFY99**

# **System Requirements**

- **Mobile Automation Support, Battalion to (EAC)**
  - **All Source Intel Fusion Processing, Analysis, & Dissemination**
  - **Targeting: Decide, Detect, Decide, Deliver, Battle Damage Assessment**
  - **Digitize the Intel Battlefield Operating System (BOS)**
  - **IEW Synchronization Collection/Mission Management**
  - **Push/Pull Intel to Win Information War**
  - **Counterintelligence, HUMINT, & OPSEC Support**
- **Automated Interface With:**
  - **Organic Army IEW Sensors/Systems**
  - **Other Army Command and Control (C2) Nodes**
  - **Joint, Theater, National Sensors and Preprocessors**
  - **Other Service's Intelligence Processors**

# Contract Opportunities

- **Title: All Source Analysis System (ASAS) Block III**
- **Objective:**
  - High Level Automation
  - CI/HUMINT
  - IMINT
  - EW/ECM
  - OPSEC
  - Enhance Existing Block II
- **Proposed Contract Type: CPAF or CPIF**
- **Key Milestones:**
  - Contract Award 15 August 2000
  - Contract Completion 14 August 2005
- **Estimated Value: \$100M**
- **Technical POC: LTC Greg Fritz (703) 275-8088**
- **Contract POC: TBD**





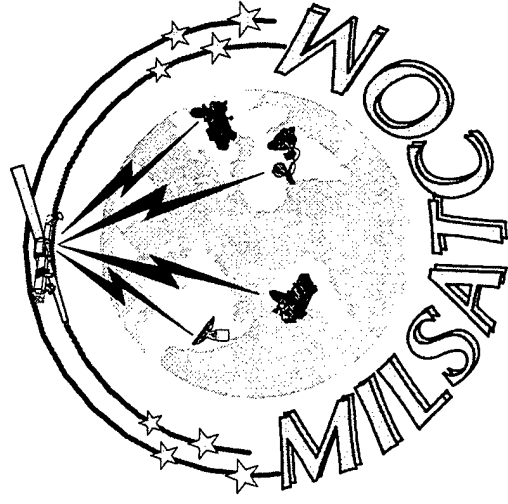
# Global Command and Control System - Army (GCCS-A)

# System Description

**GCCS-A is the Army complement to the Joint Global Command and Control System, focusing at the Army specific applications dealing with strategic and theater levels of command. The system is structured to meet the combined requirements of the Army Battle Command System and GCCS.**

# Contract Opportunities

- **Title: Global Command and Control System**
  - **Army**
- **Objective:**
  - Develop a complementary system to GCCS which provides Army users C2 unique functionalities and provides access to Joint C2 applications.
- **Proposed Contract Type: Cost Plus Award Fee**
- **Key Milestones:**
  - RFP Release - 3Q99
  - Award - 2Q00
- **Estimated Value: \$125M-\$150M**
- **Technical POC: MAJ Catherine McNerney**  
**(703) 806-6495**
- **Contract POC: Ms. Peggy Butler (703) 325-2858**



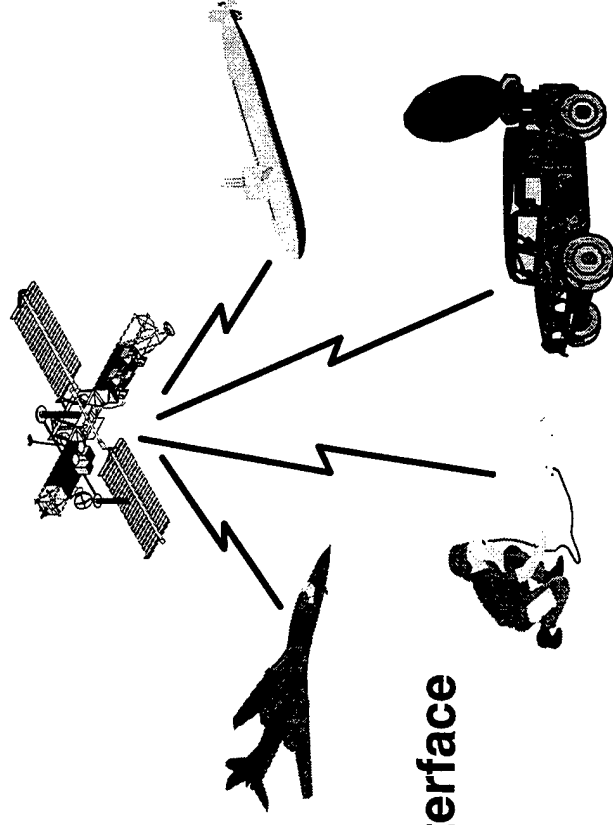
# Single Channel Anti-jam Manportable Terminal (SCAMP) Block II

# System Description

- Milstar LDR & Future Advanced EHF (AEHF) Manportable Satellite Terminal
- Worldwide Range Extension of Critical C41 Information
- Special Operations & All Army Echelons
- Provides Anti-jam, Low Probability of Intercept/ Detection

## • Interface Capabilities

- Terminal Baseband
  - Low Data Rate Voice
  - Expanded AEHF Data Rates (~20 Kbps)
- Red Data Port
- Network Ready - Ethernet Interface
- External Baseband
  - PC's LCU
  - Range Extend Army Common User System (Voice & Data) Range Extend Tactical Internet



# **Program Status**

- **Engineering Feasibility Efforts (EFE) Near Term Goals**
  - **FY98 Complete Initial Prototype Block II Terminal**
  - **FY99 Demonstrate 12-15 lbs, Extended Battery Life, Milstar Capability**
  - **FY00 Refine & Demonstrate Prototype Terminal**
    - **Spiral Development**
    - **Work Toward Advanced EHF Capabilities**
- **Technology Transfer CD-ROMs - Updated Releases Bi-Annually**
- **Demonstrate Block II Prototype Capabilities to Support 1QFY01 Milestone II Decision**

# System Requirements

Block I		Block II
Weight	37 lbs	12-15 lbs
Communication Mode	LDR Data 75-2400 Bps LDR VOICE 2400 Bps	LDR Data 75-2400 Bps, AEHF 20 Kbps (Objective) LDR Voice
Voice Quality	>=STU III	High Quality Voice Recognition
Range Extension	SINGARS (Data Only) ACUS (Data Only)	SINGARS (Data & Voice) ACUS (Data & Voice)
Battery Duration	10 Hours	24 Hours 96 Hours (Objective)
MTBOMF	600 Hours	1250 Hours
Setup Time	<10 Minutes	Objective 5 Minutes
COMM on the Move	No	Objective
Paging	No	Yes
Quantity	312 All Services	2333 Army Others TBD

# Contract Opportunity

- **Objective: Spiral Development/Test/Evaluate 20 Block II SCAMP EMD/LRIP Terminals**
  - Two (Competitive Development) Contractors
- **Proposed Contract Type: Cost Plus Award Fee**
- **Key Milestones:**
  - RFP 4QFY00
  - Award 2QFY01
- **Estimated Value: Spiral Development \$20-30M**
- **Technical POC: Mr. Carl Swenson (732) 532-5425**
- **Acquisition POC: Ms. Wendy McCutcheon (732) 532-5486**





# NOTES

# **EXECUTIVE PANEL**

**MR. EDWARD G. ELGART**  
**ACTING DEPUTY ASSISTANT SECRETARY OF THE ARMY**  
**FOR PROCUREMENT**

**MG GERARD P. BROHM**  
**CG, CECOM**

**MG DAVID R. GUST**  
**PEO, IEW&S**

**MR. EUGENE FAMOLARI, JR.**  
**ASSOCIATE DIR, CECOM RDEC**

**MRS. KATHRYN T. H. SZYMANSKI**  
**CHIEF COUNSEL, CECOM**

**MR. ANTHONY A. LaPLACA**  
**DIR, CECOM LRC**

**MR. ROBERT R. LEHNES**  
**DPEO, C3S**

**MR. DENNIS TURNER**  
**DIR, CECOM SEC**

**COL ALFRED J. ESTRELLA**  
**COMMANDER, ISEC**

**MRS. MAUREEN MACFARLAND**  
**DEP DIR, CECOM SMC**

**SYMPOSIUM  
PARTICIPANTS**

COL WILLIAM S. RODAKOWSKI  
U.S. Army Signal Center and Fort Gordon  
ATZH-CD  
Fort Gordon, Georgia 30905-5090  
(706) 791-3985  
Email: [rodakoww@emh.gordon.army.mil](mailto:rodakoww@emh.gordon.army.mil)

MR. EDWARD G. ELGART  
Office of the Assistant Secretary of the Army for Research, Development and Acquisition  
SARD-ZP  
Washington, DC 20310-0103  
(703) 695-2488  
Email: [ElgartE@sarda.army.mil](mailto:ElgartE@sarda.army.mil)

MG GERARD P. BROHM  
HQ, US Army Communications-Electronics Command  
AMSEL-CG  
Fort Monmouth, New Jersey 07703  
(732) 532-1515  
Email: [brohm@doim6.monmouth.army.mil](mailto:brohm@doim6.monmouth.army.mil)

MG DAVID R. GUST  
PEO, Intelligence, Electronic Warfare and Sensors  
SFAE-IEW  
Fort Monmouth, New Jersey 07703  
(732) 427-2153  
Email: [gust@doim6.monmouth.army.mil](mailto:gust@doim6.monmouth.army.mil)

MR. EUGENE FAMOLARI, JR.  
HQ, US Army Communications-Electronics Command  
AMSEL-RD-ADA  
Fort Monmouth, New Jersey 07703  
(732) 427-3967  
Email: [famolari@doim6.monmouth.army.mil](mailto:famolari@doim6.monmouth.army.mil)

MS. KATHRYN T. H. SZYMANSKI  
HQ, US Army Communications-Electronics Command  
AMSEL-LG  
Fort Monmouth, New Jersey 07703  
(732) 532-3120  
Email: [szymankh@doim6.monmouth.army.mil](mailto:szymankh@doim6.monmouth.army.mil)

MR. ANTHONY A. LaPLACA  
HQ, US Army Communications-Electronics Command  
AMSEL-LC  
Fort Monmouth, New Jersey 07703  
(732) 532-5757  
Email: [laplaca@doim6.monmouth.army.mil](mailto:laplaca@doim6.monmouth.army.mil)

MR. ROBERT R. LEHNES  
PEO, Command, Control and Communications Systems  
SFAE-C3S-CM  
Fort Monmouth, New Jersey 07703  
(732) 427-4148  
Email: [lehnes@doim6.monmouth.army.mil](mailto:lehnes@doim6.monmouth.army.mil)

MR. DENNIS TURNER  
HQ, US Army Communications-Electronics Command  
AMSEL-RD-SE-D  
Fort Monmouth, New Jersey 07703  
(732) 532-8207  
Email: [turnerd@doim6.monmouth.army.mil](mailto:turnerd@doim6.monmouth.army.mil)

COL ALFRED J. ESTRELLA  
Information Systems Engineering Command  
AMSEL-IE-HQ  
Fort Huachuca, Arizona 85613-5300  
(520) 538-6626  
Email: [estrella@emh1.hqisec.army.mil](mailto:estrella@emh1.hqisec.army.mil)

MRS. MAUREEN MacFARLAND  
HQ, US Army Communications-Electronics Command  
AMSEL-DSA-DD  
Fort Monmouth, New Jersey 07703  
(732) 532-7960  
Email: [macfarlm@smc1.monmouth.army.mil](mailto:macfarlm@smc1.monmouth.army.mil)

LTC MARY FULLER  
PM, Small Computer Program  
AMSEL-DSA-SCP  
Fort Monmouth, New Jersey 07703  
(732) 427-6791  
Email: [fullerm@smc1.monmouth.army.mil](mailto:fullerm@smc1.monmouth.army.mil)

MAJ MIKE BIEGA  
PM, Global Positioning System  
Los Angeles Air Force Base  
El Segundo, California 90245-4659  
(310) 363-2925  
Email: [biegamj@gps1.laafb.af.mil](mailto:biegamj@gps1.laafb.af.mil)

MAJ KEL WOOD  
PM, Night Vision/Reconnaissance, Surveillance and Target Acquisition  
SFAE-IEW-NV  
Fort Belvoir, Virginia 22060-5806  
(703) 704-3470  
Email: [kwood@nv1.army.mil](mailto:kwood@nv1.army.mil)

MR. EDWARD T. BAIR  
PEO, Intelligence and Electronic Warfare  
SFAE-IEW-D  
Fort Monmouth, New Jersey 07703  
(732) 532-0179  
Email: [bair@doim6.monmouth.army.mil](mailto:bair@doim6.monmouth.army.mil)

MR. RONALD CIALINO  
HQ, US Army Communications-Electronics Command  
AMSEL-LC-CCS-P-PS  
Fort Monmouth, New Jersey 07703  
(732) 532-2411  
Email: [cialino@doim6.monmouth.army.mil](mailto:cialino@doim6.monmouth.army.mil)

MR. THOMAS C. ENDLER  
PM, Physical Security Equipment  
AMSEL-DSA-PSE  
Fort Belvoir, Virginia 22060-5420  
(703) 704-2413  
Email: [tendler@belvoir.army.mil](mailto:tendler@belvoir.army.mil) or [endler@doim6.monmouth.army.mil](mailto:endler@doim6.monmouth.army.mil)

DR. DAVID HEBERLEIN  
HQ, US Army Communications-Electronics Command  
AMSEL-RD-NV-OD  
Fort Belvoir, Virginia 22060-5806  
(703) 704-1040  
Email: [dheberle@nv1.army.mil](mailto:dheberle@nv1.army.mil)

MR. JARVIS HICKS  
PM, Defense Communications and Army Transmission Systems  
AMSEL-DSA-TSD  
Fort Monmouth, New Jersey 07703  
(732) 532-7928 ext.5824  
Email: [hicksj@doim6.monmouth.army.mil](mailto:hicksj@doim6.monmouth.army.mil)

MR. MICHAEL R. KELEMEN  
HQ, US Army Communications-Electronics Command  
AMSEL-AC-S  
Fort Monmouth, New Jersey 07703  
(732) 532-5603  
Email: [kelemen@doim6.monmouth.army.mil](mailto:kelemen@doim6.monmouth.army.mil)

MS. MARY KELLY  
PEO, Standard Army Management Information Systems  
SFAE-PS  
Fort Belvoir, Virginia 22060-5526  
(703) 806-4200  
Email: [Kellym@peostamis.belvoir.army.mil](mailto:Kellym@peostamis.belvoir.army.mil)

MR. CHARLES PENTA  
HQ, US Army Communications-Electronics Command  
AMSEL-LC-COM-R-VI  
Fort Monmouth, New Jersey 07703  
(732) 532-5273  
Email: [penta@doim6.monmouth.army.mil](mailto:penta@doim6.monmouth.army.mil)

MR. RICHARD RICCELLI  
HQ, US Army Communications-Electronics Command  
AMSEL-LC-LEO-E-EP  
Fort Monmouth, New Jersey 07703  
(732) 532-3056  
Email: [riccelli@doim6.monmouth.army.mil](mailto:riccelli@doim6.monmouth.army.mil)

MR. CHUCK STRIMPLER  
HQ, US Army Communications-Electronics Command  
AMSEL-RD-ST-DD  
Fort Monmouth, New Jersey 07703  
(732) 427-3451  
Email: [strimple@doim6.monmouth.army.mil](mailto:strimple@doim6.monmouth.army.mil)

MR. ERIC SWENSON  
HQ, US Army Communications-Electronics Command  
AMSEL-DSA-LGS  
Fort Monmouth, New Jersey 07703  
(732) 532-7976  
Email: [swensone@smc1.monmouth.army.mil](mailto:swensone@smc1.monmouth.army.mil)

MR. EDWARD C. THOMAS  
HQ, US Army Communications-Electronics Command  
AMSEL-PE  
Fort Monmouth, New Jersey 07703  
(732) 532-4502  
Email: [thomase@doim6.monmouth.army.mil](mailto:thomase@doim6.monmouth.army.mil)

MR. CHARLES THOMPSON  
HQ, US Army Communications-Electronics Command  
AMSEL-LC-CCS-G  
Fort Belvoir, Virginia 22060-5849  
(703) 704-2076  
Email: [thompsoc@doim6.monmouth.army.mil](mailto:thompsoc@doim6.monmouth.army.mil)

MR. JAMES WAGNER  
HQ, US Army Communications-Electronics Command  
AMSEL-SE  
Fort Monmouth, New Jersey 07703  
(732) 532  
Email: [wagnerj@doim6.monmouth.army.mil](mailto:wagnerj@doim6.monmouth.army.mil)

MR. DOUG WILTSIE  
PM, Night Vision/Reconnaissance, Surveillance and Target Acquisition  
SFAE-IEW-NV  
Fort Belvoir, Virginia 22060-5806  
(703) 704-1759  
Email: [dwiltsie@nv1.army.mil](mailto:dwiltsie@nv1.army.mil)

## ACRONYMS

IDFSA	1st Digitized Force Systems Architecture
(A)	Acting
AA	Attack Assessment
AAA	Army Audit Agency
AAC	Army Acquisition Corps
AAE	Army Acquisition Executive
AAH	Apache Attack Helicopter
AAMMIS	AMC Automated Manpower Management Information System
AAN	Army After Next
AAP	Army Ammunition Plant
AAPPSO	Army Acquisition Pollution Prevention Support Office
AAT	Advanced Armament Technology; <b>ALSO:</b> Advanced Antenna Technology; <b>ALSO:</b> Automatic Analog Tester
AAV	Amphibious Assault Vehicle
AB	Army Brigade; <b>ALSO:</b> Air Base; <b>ALSO:</b> ADA Based
ABC	Activity Based Costing
ABSCA	Armed Services Board of Contract Appeals
AC	Acquisition Center
ACAT	Acquisition Category
ACC	Advanced Communications Controller; <b>ALSO:</b> Air Combat Command
ACEIT	Automated Cost Estimating Integrated Tools
ACERT	Army Computer Emergency Response Team
ACIS	Aircrew Integrated Systems
ACMA	Acquisition Career Management Advocate
ACME	Airborne Cloud Measurement Equipment
ACOE	Army Communities Of Excellence
ACOM	Atlantic Command; <b>ALSO:</b> Automatic Centralized Operations & Maintenance
ACP	Army Cost Position
ACQ	Acquisition
AC/RC	Active Component/Reserve Component
ACS	Aerial Common Sensor
ACTEDS	Army Civilian Training, Education and Development System
ACTD	Advanced Concept Technology Demonstration
ACTS	Acquisition Control & Tracking System; <b>ALSO:</b> Advanced Communications Technology Satellite; <b>ALSO:</b> Air Combat Training System
ACUS	Area Common User System
ADA	<b>(DoD software programming language)</b>
ADCCS	Air Defense Command and Control Systems
ADCS	Automated Document Conversion Service
ADDS	Army Data Distribution System
ADDSI	Army Data Distribution System Interface
AD/EXJAM	Artillery Deliverable Expendable Jammer
ADI	Architecture Development Team
ADM	Acquisition Decision Memorandum
ADMIN	Administration
ADN	Automatic Digital Network
ADNX	Automated Digital Network Exchange



ADP	Automated Data Processing
ADPA	American Defense Preparedness Association
ADO	Associate Director of Operations
ADR	Alternative Dispute Resolution
ADRP	Army Defense Information Systems Network (DISN) Router Program
ADS	Army Development Office
ADV	Advanced
AEA	Army Enterprise Architecture
AEC	Area Equipment Compound; <b>ALSO:</b> Atomic Energy Commission;
	<b>ALSO:</b> Aviation Electronics Combat;
	<b>ALSO:</b> Advanced Electronics Corporation;
	<b>ALSO:</b> Airborne Electronic Combat
AEPI	Army Environmental Policy Institute ( <b>Atlanta, GA</b> )
AFARS	Army Federal Acquisition Regulation
AFATDS	Advanced Field Artillery Tactical Data System
AFCEA	Armed Forces Communications Electronics Association
AFCS	Advanced Flight Control System
AFMS	Auxiliary Fuel Monitoring System
AGCCS	Army Global Command and Control System
AGR	Antenna Group Refurbishment
AGS	Alliance Ground Surveillance
AGSE	Aviation Ground Support Equipment
AGTS	Advanced Gunnery Training System
AHFEWS	Army High Frequency Electronics Warfare System
AI	Artificial Intelligence; <b>ALSO:</b> Acquisition Instruction
AIE	Army Interoperability Engineering
AIEW	Avionics Intelligence/Electronic Warfare
AIM	Acquisition Information Management
AIMS-R	Automated Instruction Management System - Redesign
AIN	Army Interoperability Network
AIS	Automated Information System
AIT	Automated Identification Technology;
	<b>ALSO:</b> Automation Integration Technology
AJCM	Anti-Jam Control Modem
AKMS	Army Key Management System
ALPS	Advanced Laser Protective System
ALT	Administrative Lead Time
AM	Army Management
AM3	Affordable Multi-Missile Manufacturing
AMAS	Automated Material Acquisition System
AMC	U.S. Army Materiel Command
AMCAM	U.S. AMC Deputy Chief of Staff for Ammunition
AMCLG	U.S. AMC Deputy Chief of Staff for Logistics & Operations
AMCMI	U.S. AMC Deputy Chief of Staff for Intelligence
AMCRDA	U.S. AMC Deputy Chief of Staff for Research, Development & Acquisition
AMDS	Advanced Monitoring Display System
AMPS	Aviation Mission Planning Systems
AMSAA	U.S. Army Materiel Systems Analysis Activity
AMSC	Army Management Staff College
ANAD	Anniston Army Depot
ANSI	American National Standards Institute
ANVIS	Aviation Night Vision Imaging Systems
AOA	Analysis of Alternatives

AOC	Association of Old Crows
AP	Acquisition Plan; <b>ALSO:</b> Anti-personnel
APB	Acquisition Program Baseline
APBI	Advance Planning Briefing for Industry
APES	Advanced Protective Eyewear System
APIC	Acquisition Process Improvement Campaign
APL-A	Anti-Personnel Landmine Alternatives
APP	Appropriation
APPS	Analytical Photogrammetric Positioning System;
	<b>ALSO:</b> Automated Publications Production System;
	<b>ALSO:</b> Application Portability Profile Standards
APS	Army Prepositioned Stock
APTU	Army Prototype Test Unit
AQF	Advanced QUICK FIX
AQL	Advanced Quicklook
AOP	Approved Operating Program
AR	Army Regulation
ARAT	Army Reprogramming Analysis Team
ARC	Army Reuse Center
ARIAT	Acquisition Reform Implementation Assessment Team
ARIES	Army Research, Development & Acquisition Internet Issue Entry System
ARL	Army Research Laboratory
ARNG	Army National Guard
ARPA	Advanced Research Projects Agency
ARSB	Acquisition Reform Satellite Broadcast
ARTIS	ALPHA Remote Terminal Interactive System
ASA	Assistant Secretary of the Army
ASARC	Army Systems Acquisition Review (Council/Committee)
ASAS SW	All Source Analysis System Software
ASB	Area/Aviation Support Battalion;
	<b>ALSO:</b> Army Science Board;
	<b>ALSO:</b> Army Supply Base
ASBCA	Armed Services Board of Contract Appeals
ASC	Army Simulation Center
ASCI	American Standard Code for Information Interchange
ASCT	Auxiliary Satellite Control Terminal
ASD	Advanced Systems Division
ASH	Army Space Heaters
ASHRAE	American Society of Heat, Refrigeration and Environment
ASIS	Ammunition Surveillance Information System
ASMC	American Society of Military Comptrollers
ASMP	Army Strategic Mobility Program
ASP	Army Supply Plant
ASPO	Army Space Program Office
ASSI	Aerial Scout Sensors Integration;
	<b>ALSO:</b> Additional Special Skill Indicator
AST	Analytical Simulation Team
ASTAMIDS	Airborne Standoff Mine Detection System
AT	Anti-tank
ATA	Army Technical Architecture
ATAAPS	Automated Time Attendance and Productivity System
ATARS	Advanced Technology Assessment Reports
ATAV	Army Total Asset Visibility

ATB	Aviation Training Brigade
ATC	Aberdeen Test Center; <b>ALSO:</b> Affordability Through Commonality;
	<b>ALSO:</b> Air Traffic Control
ATCCS	Army Tactical Command and Control Systems
ATCMDS	Advance Transportation Control and Movement Documents
ATCOM	U.S. Army Aviation and Troop Command
ATD	Advanced Technology Demonstration
ATIRCM	Advanced Threat Infrared Countermeasure
ATM	Asynchronous Transfer Mode
ATNAVICS	Air Traffic Navigation, Integration, Coordination System
ATRJ	Advanced Threat Radar Jammer
ATSS	Automatic Test Support System
AUM	Asset Utilization Model
AVIM	Aviation Intermediate Maintenance
AVIC	Army Visual Information Center
AVLB	Armored Vehicle-Launched Bridge
AVNS	Avionics
AWCF	Army Working Capital Fund
AWE	Army Warfighting Experiment
AWPS	Army Workload And Performance System
AWR	Army War Reserve
B	Billion
BAA	Broad Agency Announcement
BADD	Battlefield Awareness Data Dissemination
BAFO	Best and Final Offer
BASIS	Battlefield Acoustic Sensor Integration System
BAT	Brilliant Anti-Armor Submunition
BCIS	Battlefield Combat Identification Systems
BCS	Battery Computer System
BDE	Brigade
BDMS	Blade Deflection Measurement System
BEC	Base Environmental Coordinator
BED	Battlefield Environment Division
BER	Bit Error Rate; <b>ALSO:</b> Budget Execution Review
BFA	Battlefield Functional Area
BFTA	Bulk Fuel Tank Assemblies
BFVS	Bradley Fighting Vehicle System
BGAD	Blue Grass Army Depot
BID	Business Integration Division
BIP	Battlefield Interoperability Program
BITS	Battlefield Information Transmission Systems
BLDG	Building
BLIN	Budget Line
BLOS	Beyond Line Of Site
BN	Battalion
BOM	Bill of Materials
BOP	Business Opportunities Page
BP	Battle Planning
BPA	Blanket Purchase Agreement
BPG	Business Process Group
BPI	Bits Per Inch
BPV	Battlefield Planning and Visualization
BQ	Bachelor Quarters

BR	Branch
BRAC	Base Realignment and Closure
BSTF	Business Systems Task Force
BTU	British Thermal Unit; <b>ALSO:</b> Basic Terminal Unit
BRDEC	Belvoir Research Development & Engineering Center
BV	Best Value
BZ	Battle Zone
C2	Command and Control
C2SID	Command, Control and Systems Integration Directorate
C2IL	Command and Control Integration Language
C3	Command, Control and Communications
C3S	Command, Control and Communications Systems
C4I	Communications, Command, Control and Computers Intelligence
C4IEWS&IM	Communications, Command, Control and Computers Intelligence, Electronics Warfare and Sensors & Information Management
C4RDP	Command, Control, Communications and Computers Requirements Definition Program
CA	Certification Authority; <b>ALSO:</b> Commercial Activities
CAAN	Combined Arms Assessment Network
CAAS	Contracted Advisory and Assistance Services
CAC-W	CECOM Acquisition Center-Washington
CACWOO	CECOM Acquisition Center - Washington Operations Office (now CAC-W)
CAD	Cost Analysis Division; <b>ALSO:</b> Computer Aided Design; <b>ALSO:</b> Contract Appeals Division
CAD\E	Computer Aided Design And Engineering
CADEC	Counter-Air Directed Energy Capability
CAE	Computer Aided Engineering; <b>ALSO:</b> Common Application Environment
CAISI	Combat Service Support Automated Information System Interface
CAIV	Cost as an Independent Variable
CALS	Continuous Acquisition and Life-Cycle Support; <b>ALSO:</b> Computer Assisted Logistics Systems
CAM	Computer Aided Manufacturing; <b>ALSO:</b> Chemical Agent Monitor; <b>ALSO:</b> Control Account Manager
CAP	Critical Acquisition Position
CAPS	Counter Active Protection Systems
CAPS II	Consolidated Aerial Port System II
CARD	Cost Analysis Requirements Description
CARI	Corporate Academy Redesign Initiative
CAS3	Combined Arms Services & Staff School
CASCOM	U.S. Army Combined Arms Support Command
CASL	Competition Advocates Shopping List
CATT	Combined Arms Tactical Trainer
CATV	Cable Television
CAV	Cavalry
CAVE	Contractual Aspects of Value Engineering
CAW	Certification Authority Workstation
CBD	Commerce Business Daily
CBDCOM	U.S. Army Chemical and Biological Defense Command
CBI	Circuit Bundling Initiative
CBN	Carlisle Barracks Network
CBS	Common Baseline Software

CBT	Computer Based Training
CCAD	Corpus Christi Army Depot
CCD	Configuration Control Document
CCDR	Contractor Cost Data Reporting
CCITT	Consultive Committee on International Telephony and Telegraphy
CCS	Command & Control Systems
CCSLA	CECOM Communications Security Logistics Activity
CCSO	CECOM CALS Support Office
CCSS	Commodity Command Standard System
CCTT	Close Combat Tactical Trainer
CCU	Command Center Upgrade
CDG	Competitive Development Group
CDPL	Command Designated Position List
CDRL	Contract Data Requirements List
CD-ROM	Compact Disk-Read Only Memory
CDS	Compact Digital Switch
CEAC	CECOM Executive Advisory Committee
CE	Concurrent Engineering; <b>ALSO:</b> Cost Estimate
CEAC	Cost Evaluation and Analysis Center
CEC	Combat Equipment Company
CECOM	U.S. Army Communications-Electronics Command
CEG-A	U.S. Army Combat Equipment Group-Asia
CEG-E	Combat Equipment Group-Europe
CEO	Corporate Executive Officer
CEP	Concept Experimentation Program
CERDEC	CECOM & Director of CECOM Research Development & Engineering Center
CES	Circuit Emulation Service
CF	Copy Furnished
CFT	Captive Flight Test
CG	Commanding General
CGM	Computer Graphic Metafile
CGS	Common Ground Station
CGSC	Commanding General Signal Corps
CHATS	Counterintelligence/Human Intelligence Automated Tools Set
CHS	Common Hardware/Software
CI	Configuration Item; <b>ALSO:</b> Corporate Information
CI ACTD	Combat Identification Advanced Concept Technology Demonstration
CIBS-M	Common Integrated Broadcast Service - Modules
CICM	Communications Integration and Cosite Mitigation
CICS	Customer Information Control System
CID	Combat Integration Division
CIDDS	Combat Identification System for the Dismounted Soldier
CIGNM	Cecom Integrated Global Positioning System Navigation Model
CINC	Commander-in-Chief
CIO	Chief Information Officer
CIR	Contractor Information Report; <b>ALSO:</b> Critical Implementation Review
CIS	Contractor Information System; <b>ALSO:</b> Communications And Information Systems
CIT	Commercial-Industrial Type
CITIS	Contractor Integrated Technical Information Service
CIV	Civilian
CLIN	Contract Line Item Number

CLS	Contractor Logistics Support
CM	Countermeasures; <b>ALSO:</b> Countermine;
	<b>ALSO:</b> Countermobility; <b>ALSO:</b> Cruise Missile
CMD	Command
CMM	Capability Maturity Model
CMN	Common
CMP	Common Message Processor
CMS	Combat Mission Simulator;
	<b>ALSO:</b> Communications Management System
CMTS	Compliance Monitoring and Tracking System
CMWS	Common Missile Warning System
CNAD	Council of North Atlantic Treaty Organization Armament Directors
CNCMS	Counternarcotics Command and Management System
CNPS	Common Network Planning Software
COBRA	AH-1S Attack Helicopter
COE	Common Operating Environment;
	<b>ALSO:</b> Center of Excellence
COL	Colonel
COMINT	Communications Intelligence
COMM	Communications; <b>ALSO:</b> Commodity
COMP	Competitive
CONT	Contractor
CONUS	Continental United States
COP	Common Operational Picture
CORANET	Combat Ration Advanced Manufacturability Network
COSSI	Commercial Operation and Support Savings Initiative
COTS	Commercial Off-the-Shelf
CP	Command Post
CPFF	Cost Plus Fixed Fee
CPR	Cost Performance Report; <b>ALSO:</b> Cardiopulmonary Resuscitation
CPT	Captain
CPU	Central Processing Unit
CRADA	Cooperative Research And Development Agreement
CRDA	Chief, Research Development and Acquisition
	<b>ALSO:</b> Cooperative Research and Development Agreement
CREST	Career Related Experience In Science And Technology
CRPA	Controlled Radiation Pattern Antenna
CRS	Communications Realism Submodel
CSA	Chief of Staff of the Army
CSCC	Consulting Services Contract Coordinator
CSCE	Communications System Control Element
CSCI	Computer Software Configuration Item
C/SCSC	Cost/Schedule Control Systems Criteria
CSE	Critical Skills Engineer
CSEL	Combat Survivor Evacuator Locator
CSLA	Communications Security Logistics Activity
CSS	Communications Switching Systems
CSSCS	Combat Service Support Control System
CSSQT	Combat System Ship Qualification Trial
C/SSR	Cost/Schedule Status Report
CSTS	Combat Support Training System
CT1S	Common Tier 1 System
CTASC-II	Corps Theater ADP Service Center, Phase II

CTIS	Combat Terrain Information System
CTR	Center
CTSF	Centralized Training Systems Facility
CTT	Commanders Tactical Terminal
CUBE	Control Unified Battlespace Environment
CUITN	Common User Information Transport Network
CUM	Cumulative
CVW	Collaborative Virtual Workspace
DA	Department of the Army
DAB	Defense Acquisition Board
DAC	Discretionary Access Control; <b>ALSO:</b> Defense Ammunition Center
DACM	Director of Acquisition Career Management
DAD	Deployment Assistance Device
DAE	Defense Acquisition Executive
DAIG	Department of the Army Inspector General
DAMA	Demand Assigned Multiple Access
DAMMS-R	Department of Army Movement Management System - Redesign
DAO	Defense Attaché Office
DARA	Department of the Army Radiation Authorizations
DARP	Department of the Army Radiation Permits
DARPA	Defense Advanced Research Projects Agency
DASA	Defense Satellite Communications System Automatic Spectrum Analyzer
DASSS	Department of the Army Software Support Services
DB2I	Database-to-Database Interface
DBC	Digital Battlefield Communications
DBM	Data Base Management
DBOF	Defense Business Operating Fund
DBS	Direct Broadcast Satellite
DCASS	Defense Communication & Army Switched System
DCATS	Defense Communication & Army Transmission System
DCI	Directorate for Corporate Information
DCL	Defense Communication Link
DCO	Deputy Commanding Officer
DCPDS	Defense Civilian Personnel Data System
DCS	Defense Communication System
DCSCE	Downsized Communications Systems Control Element
DCSIM	Deputy Chief of Staff for Information Management
DCSPER	Deputy Chief of Staff for Personnel
DCSOPS	Deputy Chief of Staff for Operations
DCSS	Digital Communications Satellite Subsystem
DDC	Defense Distribution Center
DDN	Defense Data Network
DDRT	Defense Distribution Red River, Texas
DE	Directed Energy
DECS	DSCS Electronic/Electromagnetic Counter-Countermeasure Control Subsystem
DEF	Defense
DERA	Defence Evaluation and Research Agency ( <b>UK</b> )
DERM	Defense Satellite Communication System Engineering Resource Management Systems
DEW	Directed Energy Weapon
DF9	Diesel Fuel #9
DFARS	DoD Federal Acquisition Regulation Supplement
DFAS	Defense Finance and Accounting Office

DFCS	DSCS Frequency Division Multiple Access Control Subsystem
DFMA	Design for Manufacturing Assembly
DFPO	Dallas Field Placement Office
DGCL	DSCS Ground Mobile Forces Control Link
DGM	Defense Guidance Memorandum
DHCP	Dynamic Host Configuration Protocol
DI	Domain Integration
DII	Defense Information Infrastructure
DIIS	Directorate for Intelligence and Information Security
DIL	Digital Integrated Laboratories
DIMSS	Defense Information Systems Agency Defense Switched Network Integrated Management Support System
DINL	Device Initialization
DIS	Daylight Imaging System; ALSO: Defense Information Service/System; ALSO: Distributed Interactive Simulation
DISA	Defense Information Systems Agency
DISC4	Director of Information Systems for Command, Control, Communications and Computers
DISN	Digital Integrated Services Network; ALSO: Defense Information Systems Network
DITC	Defense Technical Information Center
DL	Distance Learning
DLA	Defense Logistics Agency
DLAMP	Defense Leadership and Management Program
DLA-\$AVE	Defense Logistics Agency - \$avings through Value Enhancement
DLP	Distance Learning Program
DLS	Depot Logistics System
DLSC	Defense Logistics Support Command
DMC	Defense Mega Center
MMM	Materiel Management Directorate
DMS	Defense Messaging System; ALSO: Data Management System
DMZ	Demilitarized Zone
DNR	Digital Network Radio
DOCS	Defense Satellite Communications Systems Operations Control System
DoD	Department of Defense
DODAAC	Department of Defense Activity Address Code
DOE	Department of Energy
DOIM	Directorate of Information Management
DOPMA	Defense Officer Personnel Management Activity
DORRA	Defense Operations Research and Resource Analysis Office
DOS	Disk Operating System
DOSS	Defense Satellite Communications Systems Operational Support System
DOSSNET	Defense Satellite Communications Systems Operational Support System Network
DPAS	Defense Property Accountability System
DPEO	Deputy Program Executive Officer
DPG	Dugway Proving Ground
DPMO	Deployment Process Modification Office
DPW	Directorate of Public Works
DRE	Readiness Directorate
DREN	Defense Research Engineering Network
DRFP	Draft Request for Proposal



DRM	Directorate for Resource Management
DS	Direct Support
DSAB	Defence Science Advisory Board ( <b>Canadian</b> )
DSAMS	Defense Security Assistant Management System
DSC	Digital Source Collector
DSCS	Defense Satellite Communications Systems
DSCSI	Defense Satellite Communications Systems Installations
DSED	Direct Support Engineering Directorate
DSMS	Defense Spectrum Management System
DSN	Defense Switched Network
DSREDS	Digital Storage and Retrieval Engineering Data System
DSRM	Directorate of Safety Risk Management
DSSMP	Digital Switched Systems Modernization Program
DSVS	Dismounted Soldier Video System
DSWA	Defense Special Weapons Agency
DTAP	Defense Technology Area Plan
DTAV	Defense Total Asset Visibility
DTD	Document Type Description; <b>ALSO:</b> Dated
DTIC	Defense Technical Information Center
DT/OT	Development Tests/Operational Tests
DTUPC	Design to Unit Production Cost
DTV	Drivers Thermal Viewer
DUAP	Dual Use Application Program
DVD	Direct Vendor Delivery
DVE	Driver's Vision Enhancer
DVTC	Desktop Video Teleconferencing
DWN	Dismount Warrior Network
EA	Executive Agent; <b>ALSO:</b> Electronic Attack; <b>ALSO:</b> Economic Analysis
EAC	Echelons Above Corps
EA-CI	Executive Agent for Corporate Information ( <b>CECOM CG</b> )
EAD	Extended Air Defense
EASI	Engineering Air Systems, Inc.
EBB	Electronic Bulletin Board
EBBS	Electronic Bulletin Board System
EC	Electronic Commerce
ECAS	External Compliance and Assessment System
ECB	Echelons Corps and Below
ECCM	Electronic/Electromagnetic Counter-Countermeasure
ECCP	European Command Centers Program
ECP	Engineering Change Proposal
ECU	Environmental Control Units
EDI	Electronic Data Interchange
EDT	Engineering Development Test
EFE	Engineering Feasibility Efforts
EIE	Environmentally Integrated Effects
EGI	Embedded Global Positioning System Inertial
EIE	Equipment Inventory Evaluation
EIP	Engineering Installation Package
EKIP	Extended Korea Improvement Plan
ELINT	Electronics Intelligence
ELP	Environmental Leadership Program
EMC	Electromagnetic Compatibility

EMD	Engineering and Manufacturing Development; <b>ALSO:</b> Environmental Management Division
EMI	Electromagnetic Interface
EMR	Environmental Management Review
EN	Enemy; <b>ALSO:</b> Engineer; <b>ALSO:</b> Extension Node
ENGR	Engineer(ing)
ENS	Explosive Neutralization System
EO	Electro-Optical; <b>ALSO:</b> Equal Opportunity
EP	Eastpac
EPA	Economic Price Adjustment; <b>ALSO:</b> Extended Planning Annex; <b>ALSO:</b> Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
EPG	Electronic Proving Grounds, Fort Huachuca AZ
EPLRS	Enhanced Position Location Reporting System
EPP	Electric Power Plant
EPR	Equipment Performance Report
EPRB	Emergency Position-Indicating Radio Beacon
ES	Electronic Support
ESC	Electronic Systems Center; <b>ALSO:</b> Executive Steering Committee
ESMB	Explosive Standoff Minefield Breacher
ESP	Equipment Survey Program
ESSC	Electronic Single Support Center
ESSD	Executive Software Systems Directorate
ESSO	European Software Support Office
ESSS	Electronic Single Support Strategy
ESTPC	Environmental Security Technology Certification
ET	Earth Terminal
ETC	Earth Terminal Complex
ETLOS	Enhanced Target Location and Observation System
ETM	Electronic Technical Manual
ETT	Environmental Technology Team
EUCOM	European Command
EV	Earned Value
EV/AT	Evaluation and Acceptance Test
EVM	Earned Value Management
EW	Electronic Warfare
EXSUM	Executive Summary
FA	Functional Area; <b>ALSO:</b> First Article; <b>ALSO:</b> Field Artillery
FAAD	Forward Area Air Defense
FAD	Funding Allowance Document
FADEC	Full Authority Digital Electronic Control
FAI	First Article Inspection
FAMSIM	Family of Simulations/Simulators
FAQ	Frequently Asked Questions
FAR	Federal Acquisition Regulation
FASA	Federal Acquisition Streamlining Act
FAST	Function Analysis System
FATDS	Field Artillery Tactical Data System
FBCB2	Force XXI Battle Command Brigade and Below
FBEO	Fort Belvoir Engineering Office
FCI	Fire Control Information
FCIM	Flexible Computer Integrated Manufacturing

FCS	Fire/Forward Control Section
FCT	Foreign Comparative Test
FDD	First Digitized Division
FDDI	Fiber-Optic Distributed Data Interface
FDMA	Frequency Division Multiple Access
FDS	Fire Direction System
FDSWS	Future Direct Support Weapon System
FECA	Federal Employees Compensation Act
FEMA	Federal Emergency Management Agency
FET	Firewall Evaluation Team
FF	Fast Forward; <b>ALSO:</b> Firefinder
FFP	Firm-Fixed Price
FG	Field Grade
FIAT	Field Inspection and Acceptance Test
FIS	Firefighters' Integrated Suit
FLEO	Fort Lee Field Office
FLIR	Forward Looking Infrared Radar
FLOT	Forward Line of Troops
FLTC	Flexible Long Term Contract
FLTS	Flight Line Test Set
FMC	Fully Mission Capable
FMG	Fort Monmouth Garrison
FMS	Foreign Military Sales
FMTV	Family of Medium Tactical Vehicles
FOC	Future Operational Capabilities
FORSCOM	U.S. Army Forces Command
FOS	Forward Observer System
FOSI	Format Output Specification Instance
FOTS	Fiber Optic Transmission System
FOTT	Follow-On-To-Tow
FPA	Force Planning Analysis; <b>ALSO:</b> Force Protection Alert
FPED	Force Projection Engineering Directorate
FPT	Follow-On Production Test
FREQ	Frequency
FRIT	Financial Restructuring Implementation Team
FRP	Full Rate Production
FRPA	Fixed Radiation Pattern Antenna
FS	Feasibility Study; <b>ALSO:</b> Field Station
FSA	Functional Support Agreement
FSED	Fire Support Engineering Division
FSS-L	Functional Support Services-Lee
FT	Fort
FTR	Financial Transaction Register
FTS2000	Federal Telecommunications System 2000
FTSS	Flight Test Simulation Station
FTX	Field Training Exercise
FUE	First Unit Equipment
FWD	Forward
FY	Fiscal Year
GATES	Global Air Transportation Execution System
GBCS (L&H)	Ground Based Common Sensor - Light & Heavy
GBS	Global Broadcast Services; <b>ALSO:</b> Ground Based Sensors
GCOP	Ground Common Operating Picture

GDOS	General Dynamics Ordnance Systems, Inc.
GEA	General Electric American
GEN II	Second Generation
GFE	Government Furnished Equipment
GGCL	Government to Government Communications Link
GMF	Ground Mobile Forces
GOSC	General Officer Steering Committee
GOTS	Government Off-the-Shelf
GPS	Global Positioning System
GRCS	Guardrail Common Sensor
GRF	Ground Relay Facility
GSCI	Gulf States Counterdrug Initiative
GSM	Ground Station Module
G-STAMIDS	Ground - Standoff Mine Detection System
GTC3S	Global Terrestrial Critical Control Circuit System
GTSI	Government Technology Services, Inc.
GUI	Graphical Users Interface
(H)	Heavy
HAB	Heavy Assault Bridge
HAC	House Appropriations Committee
HBCU/MI	Historically Black Colleges & Universities/Minority Institutions
HCI	Horizontal Contracting Integration
HCLOS	High Capacity Line of Sight Radio
HDPE	High Density Polyethylene
HEMTT	Heavy Expanded Mobility Tactical Truck
HIARNG	Hawaii Army National Guard
HIDTA	High Intensity Drug Trafficking Area
HIFX	High Energy Flash X-Ray
HIOS	High Intensity Optical Source
HLA	High Level Architecture
HMMWV	High Mobility, Multipurpose Wheeled Vehicle
HOMES	Housing Operations Management System
HPC	High Performance Computing
HPI	Horizontal Production Integration
HQ	Headquarters
HQDA	Headquarters, Department of the Army
HRDD	Human Resources Development Division
HRMM	Human Resource Management Model
HS3	Hunter Sensor Suite Surrogate
HSMS	Hazardous Substance Management System
HSS	Hot Spot Simulators; <b>ALSO:</b> Health Service Support
HSTAMIDS	Handheld Standoff Mine Detector System
HTI	Horizontal Technology Integration
HT/MT	Heavy Terminal/Medium Terminal
HTU	Handheld Terminal Unit
HW	Hardware
I2WD	Intelligence and Information Warfare Directorate
IAAAP	Iowa Army Ammunition Plant
IAEWG	International Acquisition Education Working Group
IAS	Infrastructure Architecture Solutions
IATO	Interim Approval to Operate
IBOM	Installation Bill of Materials
IBR	Integrated Baseline Review

ICAM	Improved Chemical Agent Monitor
ICAPP	Interim Configuration Management And Procurement Program
ICAS	Internal Compliance and Assessment System
ICD	Interface Control Document
ICF	Interconnect Facility
ICH	Improved Cargo Helicopter
ICOM	Integrated Communication
ICP	Interim Change Package; <b>ALSO:</b> Inventory Control Point; <b>ALSO:</b> International Cooperative Program
ICS3	Integrated Combat Service Support System
ICT	Integrated Concept Team
ICTAP	Interagency Career Transition Assistance Program
ID	Identify; <b>ALSO:</b> Infantry Division
IDE	Integrated Data Environment
IDEA	International Defense Educational Arrangement
IDIQ	Indefinite Delivery/Indefinite Quantity
IDM	Improved Data Modem
IDNX	Integrated Digital Network Exchange
IDP	Individual Development Plan
IECU	Improved Environmental Control Unit
IEEE	Institute of Electrical and Electronics Engineers
IETF	Internet Engineering Task Force
IETMS	Interactive Electronic Technical Manuals
IEW	Intelligence and Electronic Warfare
IEWCS	Intelligence Electronic Warfare Common Sensor
IEWD	Intelligence and Electronic Warfare Directorate
IEW&S	Intelligence Electronics Warfare & Sensors
IFB	Invitation For Bid
IFF	Identification Friend or Foe
IFS	Integrated Facilities System
IFSAS	Initial Fire Support Automated System
IG	Inspector General
IGMP	Internet Group Multicast Protocol
ILAP	Integrated Logistics Analysis Program
ILOGS	Integrated Logistics Systems
ILIR	Independent Laboratory In-House Research; <b>ALSO:</b> Independent Laboratory Innovative Research
ILS	Industrial Logistics System
ILSC	Industrial Logistics Systems Center
ILSMT	Integrated Logistics Support Maintenance Team (Navy)
IM	Information Management
IMA	Information Mission Area
IM&T	Information Management and Telecommunications
IMCSRS	Installation Materiel Condition Status System
IMETS	Integrated Meteorological System
IMMC	Intelligence Materiel Management Center; <b>ALSO:</b> Integrated Materiel Management Center
IMPAC	International Merchants Purchase Authorization Card
IMPRINT	Improved Performance Research Integration Tool
IMSE	Improved Mobile Subscriber Equipment
INC	Internet Controller
INF	Intermediate-Range Nuclear Forces

INOD	Improved Night/Day Observation/Fire Control Device
INSCOM	Intelligence and Security Command
IO	Information Operations
IOC	U.S. Army Industrial Operations Command
IOT	Initial Operator Test
IOTE	Initial Operational Test and Evaluation
IP	Internet Protocol
IPD	Intelligent Product Data
IPFU	Improved Physical Fitness Uniform
IPM	Inventory Projection Model
IPO	International Programs Office
IPR	In-Processing Review
IPT	Integrated Process Team
IR	Internal Review; <b>ALSO:</b> InfraRed
IRAC	Internal Review Audit Compliance
IRCM	Infrared Counter-countermeasures
IR&D	Independent Research & Development
IRPP	Ionizing Radiation Protection Program
IRPRS	Integrated Requirements and Purchase Request System
IREMBASS	Improved Remotely Monitored Battlefield Sensor System
ISACM	Integrated Situational Awareness & Countermeasures
ISAP	Information System Architecture Plan
ISC	Information Systems Command
ISCCO	Information Systems Command Contracting Office
ISCE	Information Systems Cost Estimation
ISDN	Integrated Services Digital Network
ISEC	Information Systems Engineering Command
ISED	Infrastructure Systems Engineering Directorate
ISLC	Industrial Logistics Systems Center
ISM	Integrated Sustainment Maintenance
ISMA	Information Systems Management Activity (now: <b>Systems Management Center</b> )
	<b>ALSO:</b> Improved Satellite Multichannel Antenna
ISS	Interactive Support System; <b>ALSO:</b> Information Systems Security
ISSAA	Information Systems Selection Acquisition Agency
ISSC	Information Systems Software Center
ISSO	Information Systems Security Officer
ISSP	Information Systems Security Plan
ITEA	International Test and Evaluation Association
ITOP	International Test Operations Procedure
ITS	Information Technology Solutions, Inc.
ITW	Integrated Tactical Warning
IVIS	Inter Vehicular Information System
IVMMD	Interim Vehicle Mounted Mine Detector
IV&V	Independent Verification and Validation
J&A	Justification & Approval
J&C	Justification & Certification
JCALs	Joint Computer-Aided Acquisition and Logistics Support
JCG-CE	Joint Commanders' Group - Communications- Electronics
JDAL	Joint Duty Assignment List
JER	Joint Ethics Regulation
JFR	Joint Functional Requirements
JILSMT	Joint Integrated Logistics Support Management Team

JISR	Joint Intelligence, Surveillance and Reconnaissance
JMASS	Joint Modeling And Simulation System
JNM	Joint Network Management
JORD	Joint Operational Requirements Document
JP8	Jet Propellant #8
JPO	Joint Programs Office
JRISS	Joint Recruiting Information Support System
JRSC	Jam Resistant Secure Communications
JSAT	Joint Systems Acceptance Test
JSLIST	Joint Services Lightweight Integrated Suit Test
JSMG	Joint Service Material Group
JSTARS	Joint Surveillance Target Attack Radar System
JTA	Joint Technical Architecture
JTACS	Joint Tactical Area Communications Systems
JTF	Joint Task Force
JTIDS	Joint Tactical Information Distribution System
JTT	Joint Tactical Terminal
JUSE	Joint User Switch Exercise
JWICS	Joint Worldwide Intelligence Communication System
KBDT	Knowledge Based Doctrine Tool
KCIU	Korean Communications Infrastructure Upgrade
KSSO	Korean Software Support Office
KTN	Korean Telephone Network
KW	Kilo Watt (1000 Watts of Electrical Power)
LADS	Laundry Advanced System
LAN	Local Area Network
LAR	Logistics Assistance Representative
LAV	Light Armored Vehicle
LBM	Long Burn Motor
LC	Launch Complex
LCC	Life Cycle Cost
LCCE	Life Cycle Cost Estimate
LCFH	Large Capacity Field Heaters
LCM	Life Cycle Model
LCU	Line Control Unit
LDAP	Leader Development Action Plan
LDR	Low Data Voice
LDOOC	Light Digital Tactical Operations Center
LEAD	Letterkenny Army Depot
LEO	Logistics Engineering Operations Directorate
LESCO	Logistics Engineering and Environmental Support Services, Inc.
LHGXA	Lightweight High-Gain X-Band Antenna
LIA	Logistics Integration Agency
LIF	Logistics Intelligence File
LIWA	Land Information Warfare Activity
LLDR	Lightweight Laser Designator Rangefinder
LLRW	Low Level Radioactive Waste
LMD	Logistics & Maintenance Directorate
LME	Lightweight Maintenance Enclosure
LMI	Logistics Management Institute
LMST	Lightweight Multiband Satellite Terminal
LNO	Liaison Officer
LOC	Location; <b>ALSO:</b> Lines of Code

LOGPARS	Logistics Planning And Requirements System ( <b>Marine Corps</b> )
LOGSA	Logistics Support Activity
LOGSTAT	Logistics Status
LORA	Level Of Repair Analysis
LOS	Line of Sight
LRAS3	Long Range Advanced Scout Surveillance (Sensor/System)
LRC	Logistics and Readiness Center
LRU	Line Replacement Unit
LRIP	Low Rate Initial Production
LRRDAP	Long Range Research, Development & Acquisition Plan
LRU	Line Replaceable Unit
LSE	Logistics Support Element
LSSC	Logistics Systems Support Center
LT	Lieutenant
LTC	Lieutenant Colonel
LTLCS	Long Term Life Cycle Support
LUT	Limited User Test
LVRs	Lightweight Video Reconnaissance System
LVST	Lead Verification Site Test
LW	Land Warrior
M	Million
MAC	Mandatory Access Control
MACOM	Major Command
MAD	Management Accounting Division
MAE	Medium Altitude Endurance
MAGS	Manage Authorized Grades and Skills
MAILS	Maintenance Activity Information Logistics System
MAJ	Major
MAN	Metropolitan Area Network
MANPRINT	Manpower & Personnel Integration
MAP	Mobile Antenna Platform
MAPI	messaging application programming interface
MAPS	Mobilization Asset Planning System;
	<b>ALSO:</b> Modular Azimuth Positioning System;
	<b>ALSO:</b> Mobility Analysis & Planning System
	<b>ALSO:</b> Material Acquisition Processing System
MARC	Maintenance Manpower Requirements Criteria
MARCORSYSCOM	Marine Corps Systems Command
MAS	Multiple Award Schedule
MAST	MILSTAR Advanced Satellite Terminal
MB	Megabyte
MBONE	Multi Broadcast Transmissions
MBU	Modern Burner Unit
MC	Management Committee
MCA	Military Construction, Army
MCD	Mines, Countermine and Demolitions ( <b>Picatinny Arsenal</b> )
MCDS	Mission Critical Defense Systems
MCEB	Military Communications-Electronics Board
MCP	Management Control Process
MCS	Maneuver Control System
MDARS-I	Mobile Detection Assessment Response System-Improved
MEA	Management Engineering Activity;
	<b>ALSO:</b> Munitions Effectiveness Assessment



MEP	Maintenance Enhancement Program;
	<b>ALSO:</b> Mobile Electric Power
MEPCOM	Military Enlistment Processing Command
MFC	Material Fielding Conference
MFLS3	Multiple Folded Laser-Radar Surveillance Survivability Sensor
MFP	Materiel Fielding Plan
MFS3	Multi-Function Staring Sensor Suite
MG	Major General; <b>ALSO:</b> Machine Gun
MGPTS	Modular General Purpose Tent System
MH/K	Mine Hunter/Killer
MIBOM	Major Item Bill of Material
MIC	Major Item Center
MICOM	U.S. Army Missile Command
MIDAS	Multiplexer Integration & DCSS Automated System
MIDS	Multifunctional Information Distribution System
MIL	Military
MILCOM	Military Communications
MILDEP	Military Deputy
MILSATCOM	Military Satellite Communications
MILSTAR	Military Strategy & Tactical Relay
MIL-STD	Military Standard
MIRPS	Modified Improved Reserve Parachute System
MIRS	MEPCOM Integrated Resource System
MISSI	Multilevel Information Systems Security Initiative
MLAAP	Milan Army Ammunition Plant
MLRS	Multiple Launch Rocket System
MLS	Multilevel Secure
MM	Manned Module
MMAD	Maxi-Mini and Databases
MMC	Materiel Management Center
MMR	Military Munitions Rule
MMS	Meteorological Measuring Set
MNVD	Monocular Night Vision Device
MOA	Memorandum of Agreement
MOD	Modernization; <b>ALSO:</b> Ministry of Defence (UK)
MOLLE	Modular Lightweight Load Carrying Equipment
MOUT	Military Operations in Urban Terrain
MP	Modernization Plan
MPI	Multiple Power Input
MPMC	Multi-National Program Management Course
MPOA	multi-protocol over asynchronous transfer mode
MPRC	Multi-Purpose Range Complex
MPRS	Mission Planning Rehearsal System
MR	Materiel Release
MRC	Major Regional Conflict; <b>ALSO:</b> Major Regional Contingency;
	<b>ALSO:</b> Manpower Requirements Change;
	<b>ALSO:</b> Materiel Release Confirmation
MRDEC	Missile Research, Development, and Engineering Center
MS	Modeling and Simulation; <b>ALSO:</b> Milestone
MSC	Major Subordinate Command
MSE	Mobile Subscriber Equipment
MSECBS	Multi-Service Electronic Combat Bulletin Board System
MSED	Messaging Systems Engineering Directorate

MSN	Mission
MSO	Multi-Service Operation; <b>ALSO:</b> MSE Systems Overhaul
MSR	Military Service Requirement
MSRT	Mobile Subscriber Radiotelephone Terminal
MTBOMF	Mean Time Between Operational Mission Failures
MTD	Materiel Test Directorate ( <b>White Sands Missile Range</b> )
MTG	Military Tactical Generator; <b>ALSO:</b> Meeting
MTI	Moving Target Indicator
MTMP	Major Command Telephone Modernization Program
MTS	Movement Tracking System; <b>ALSO:</b> Modernization Through Spares
MUBLCOM	Multiple Path Beyond Line-Of-Sight Communications
MW	Mounted Warrior
MWO	Modification Work Order
MWRH	Mounted Water Ration Heater
MYPB	Multiple Year Packaged Buy
NAC	National Automotive Center
NAF	Non-Appropriated Funds
NATO	North Atlantic Treaty Organization
NAV	Navigation
NAVWAR	Navigation Warfare
NBC	Nuclear, Biological & Chemical
NCMA	National Contract Management Association
NCO	Non-Commissioned Officer
NCR	Nuclear Regulatory Commission
NCS	Node Center Switch
NDI	Non-Developmental Item
NDIA	National Defense Industrial Association
NEO	Non-Combat Evacuation Operations/Order
NEOF	No Evidence of Failure
NES	Network Encryption System
NET	Network; <b>ALSO:</b> New Equipment Training
NGATS	New Generation Army Target System
NGB	National Guard Bureau
NGC	Northrop Grumman Corporation
NIPRNET	Non-Classified Internet Protocol Router Network
NIR	Near Infrared
NIST	National Institute of Standards & Technology
NL	Natural Language
NLOS-CA	Non Line-Of-Sight (Combined Arms)
NMC	Network Management Center
NMCC	National Military Command Center
NMD	National Missile Defense
NOM	Nomenclature
NRAD	Naval Research and Development
NRC	Nuclear Regulatory Commission, U.S.
NRCC	National Range Control Center
NRDEC	U.S. Army Natick Research, Development and Engineering Center
NRL	Naval Research Laboratory
NRZ	Non-Return to Zero
NSA	National Security Agency
NSE	National Support Element
NSM	Network & Systems Management
NSN	National Stock Number

NT	New Technology
NTDR	Near Term Data Radio
NTE	Not to Exceed
NV	Night Vision
NVESD	Night Vision Electronic Sensors Directorate
NVG	Night Vision Goggle
O/A	On or About
OAC	Officers Advanced Course
OBS	Out-of-Band Signaling
OC1	Observer Controller; <b>ALSO:</b> Operation Control
OCONUS	Outside the Continental United States
OCP	Organizational Concept Plan
ODAP	Officer Development Action Plan
ODS	Officer Development Office
ODU	Organizational Documentation Update
OHN	Occupational Health Nurses
OIPT	Overarching Integrated Process Team
OJE	Operation Joint Endeavor
OJG	Operation Joint Guard
OMA	Operations Maintenance Army
OMSC	Object Management Standards Category
ONS	Operational Needs Statement
OOTW	Operations Other Than War
OP	Observation Post
OPA	Other Procurement Army; <b>ALSO:</b> Overarching Partnering Agreement
OPCON	Operational Control
OPLOC	Operating Location
OPNS	Operations
OPO	Operational Performance Objectives
OPOM	Officer Personnel Management System
OPTEC	U.S. Army Operational Test & Evaluation Command
OPTEMPO	Operating Telecommunications Modernization Project
OPTNET	(trade name for software tool owned by MIL-3 Co.)
ORA	Operational Requirements Analysis
ORD	Organization Requirements Decrement
ORION	(code name for System)
O&S	Operations & Support
OS	Operating System
OSAT	On-Site Acceptance Test
OSCAR	Outside Cable Rehabilitation Program
OSCR	Operating and Support Cost Reduction
OSD	Office of the Secretary of Defense
OSIA	On-Site Inspection Agency
OSPF	Open Shortest Path First
OST	U.S. Army Operational Test & Evaluation Command Systems Team
OT	Operational Test
OTAR	Over the Air Rekeying
OTM	On-The-Move
OTRR	Operational Test Readiness Review
P3I	Pre-Planned Product Improvement
P&M	Producibility And Manufacturing
PACOM	Pacific Command
PAD	Product Assurance Directorate

PADDS	Procurement Automated Data and Document System
PA&I	Planning, Analysis & Integration Directorate
PAP	Personnel Assistance Point; <b>ALSO:</b> Product Assurance Plan
PAT	Process Action Team
PBBE	Performance Based Business Environment
PBD	Program Budget Decision
PBG	Program Budget Guidance
PC	Personal Computer
PCD	Platform Compatibility Demonstration
PCMS	Purchase Card Management System
PCS	Permanent Change of Station
PCTCF	Pentagon Technical Control Facility Team
PDS	Protected Distribution System
PED	Production Engineering Division
PEG	Program Element Group
PEO	Program Executive Officer; <b>ALSO:</b> Pentagon Engineering Office
PERMS	Personnel Electronic Record Management System
PERS	Personnel
PERSCOM	Personnel Command
PERSTAT	Personnel Status
PFSA	Post-Fielding Support Analysis
PIE	Policy and Information Encyclopedia
PIPE	Product Integrity and Production Engineering
PLGR	Precision Lightweight Global Positioning System Receiver
PLS-E	Palletized Load System - Enhanced
PLT	Production Lead Time
PM	Project Manager
PMCS	Programmable Modular Communications System
PMIT	Project Management Integration Test
PMR	Provisioning Master Record; <b>ALSO:</b> Program Management Review
PMSW	Project Manager for Signals Warfare
POC	Point of Contact; <b>ALSO:</b> Proof of Concept
POE	Program Office Estimate
POF	Physics Of Failure
POM	Program Objective Memorandum; <b>ALSO:</b> Preparation for Overseas Movement
PORT	Portable
POSIX	Portable Operating System based on Unix
POTS/ISDN	Plain Old Telephone System/Integrated Services Digital Network
PPBES	Planning, Programming, Budgeting, and Execution System
PPIMS	Past Performance Information Management System
PPL	Provisioning Parts List
PPSS	Post Production Software Support
PPT	Physical Prototyping Team
PPTP	Point-to-Point Tunneling Protocol
PQA	President's Quality Award
PQT	Prototype Qualification Testing
PRIME	Product Information for Manufacturing Excellence
PROP	Propellant
PRR	Production Readiness Review
PSAB	Prince Sultan Air Base (Saudi Arabia)
PSCCE	Production Satellite Configuration Control Element
PSEMO	Physical Security Equipment Management Office

P-SETS	phones
PSG	Preliminary Study Group
PSL	Program Support-Logistics; <b>ALSO:</b> Physical Simulation Laboratory
PSM	Professional Staff Members
PSR	Product Status Review
PSTN	Public Switched Telephone Network
PSYOP	Psychological Operations
PT1S	Primary Tier 1 Segment
PTF	Patch & Test Facility
PTN	Paint The Night
PTT	Protocol Test Tool
PVC	Permanent Virtual Circuit
PVT	Production Verification Testing
PW	Public Works
PWD	Procurement Work Directive
Q&RA	Quality and Reliability Assurance
Q or QTR	Quarter
QA	Quality Assurance
QASAS	Quality Assurance Specialist (Ammunition Surveillance)
QAT	Quality Assurance Team
QDR	Quality Deficiency Report; <b>ALSO:</b> Quadrennial Defense Review
QRC	Quick Reaction Capability
QWG	Quadripartite Working Group
RADCON	Army Radiological Control
RAM	Random Access Memory;
	<b>ALSO:</b> Reliability, Availability & Maintainability
RAP	Radiological Assistance Program
RAU	Remote Access Unit; <b>ALSO:</b> Radio Access Unit
RCM	Requirements Correlation Matrix
RCO	Radiation Control Officer
RCT	Repair Cycle Time
R&D	Research & Development
RDBMS	Relational Database Management System
RDEC	Research, Development and Engineering Center
RDIT	Replication, Distribution, Installation and Training
RDL	Rapid Deployment Launcher
RDP	Requirements Definition Program
REA	Request for Equitable Adjustment
REBASS	Remotely Monitored Battlefield Sensor System
REC	Record of Environmental Consideration
RF	Radio Frequency
RFI	Request for Information
RFID	Radio Frequency Identification
RFIS	Radio Frequency Interface Subsystem
RFP	Request for Proposal
RFPI	Rapid Force Projection Initiative
RFQ	Request For Quotation
RFPI	Rapid Force Projection Initiative
RISTA	Reconnaissance, Intelligence, Surveillance and Target Acquisition
RIT	Rochester Institute of Technology
R&M	Reliability & Maintainability
RMA	Rocky Mountain Arsenal
RMS	Ride Motion Simulator

ROC-V	Recognition of Combat Vehicles
ROLR	Reject On-Line Re-Entry
RP&FS	Rapid Prototyping & Field Support
RPP	Radiation Protection Program; <b>ALSO:</b> Retrograde Processing Point
RPPE	Radiation Protection Program Evaluation
RRAD	Red River Army Depot
RRPR	Reduced Range Practice Rocket
RS	Radiation Status; <b>ALSO:</b> Radar Set; <b>ALSO:</b> Recommended Standard
RSC	Regional Support Center
RSCCE	Replacement Satellite Configuration Control Element
RSTA	Reconnaissance, Surveillance and Target Acquisition
RTE	Remote Terminal Emulation
RTV	Rapid Terrain Visualization
SA	Security Assistance; <b>ALSO:</b> System Administrator; <b>ALSO:</b> Situation Awareness
SAAGA	Small Affordable Anti-Jam Global Positioning System Antenna
SAAS	Standard Army Ammunition System
SADARM	Seek And Destroy Armament
SAG	Sub Activity Group; <b>ALSO:</b> Study Advisory Group
SAIV	Schedule as an Independent Variable
SAM	Single Agency Manager
SAMD	Security Assistance Management Directorate
SAMS	Standard Army Maintenance System
SAM-T	State of the Art Medium Terminal
SANG	Saudi Arabian National Guard
SAPAS	Standard Army Procurement Accounting System
SAR	Synthetic Aperture Radar
SARDA	Secretary of the Army for Research, Development & Acquisition
SARSAT	Search and Rescue Satellite
SARSS	Standard Army Retail Supply System
SARSS-O	Standard Army Retail Supply System Objective
SAT	System Acceptance Test
SATCOM	Satellite Communications
SAVE	Society of Value Engineers
SAW	Squad Automatic Weapon
SBA	Sustaining Base Automation; <b>ALSO:</b> Small Business Administration <b>ALSO:</b> Simulation Based Acquisition
SBIR	Small Business Innovative Research
SBIS	Sustaining Base Information System
SBPS	Standard Property Book System
SCAFFIP	Scanning Fast Field Program
SCAMP	Single Channel Anti-Jam Manportable
SCCE	Satellite Configuration Control Element
SCIPUFF	Second-Order Closure Integrated PUFF
SCORE	Southern Command Relocation
SCP	Small Computer Program; <b>ALSO:</b> Software Change Package
SCR	Senior Command Representative
SCRA	South Carolina Research Authority
SCSI	Small Computer System Interface
SCTR	Single Channel Transponder Receiver
SCWO	Super Critical Water Oxidation
SDB	Small Disadvantaged Business

SDC	Software Development Center
SDI	Selective Dissemination of Information
SDR	Surrogate Digital Radio
SDS	Standard Depot System
SDT	Software Development Test
SDU	Storage Device Unit
SEALS	Security Equipment And Locking Systems
SEC	Software Engineering Center
SED	Software Engineering Directorate
SEN	Small Extension Node; <b>ALSO:</b> System Evaluation Network
SERDP	Strategic Environmental Research And Development Program
SFG	Special Forces Group
SGF	Second Generation FLIR; <b>ALSO:</b> Synthetic Ground Facility
SGS	Smoke Generator System
SHA	Space Heater Arctic
S&HDS	Safety and Health Data Sheet
SHF	Super High Frequency
SHS	Space Heater Small
S&I	Surveys and Investigations
SIFO	Systems & Integration & Fielding Office
SINCGARS	Single Channel Ground and Airborne Radio System
SIDPERS	Standard Installation/Division Personnel System
SIGINT	Signal Intelligence
SIL	System Integration Laboratory
SIMITAR	Simulations in Training for Advanced Readiness
SIP	Single Channel Ground and Airborne Radio System Improvement Program
SIPRNET	Secret Internet Protocol Router Network
SIS	Secondary Items Study
SIT	Systems Integration Test
SITREP	Situation Report
SIV	System Integration Van
SKA	Skills, Knowledge, Attributes
SLAD	Survivability Lethality Analysis Directorate
SLAN	Secure Local Area Network
SMA	Supply Management Army
SM-ALC	Sacramento Air Logistics Center
SMART-T	Secure Mobile Anti-Jam Reliable Tactical - Terminal
SMC	Systems Management Center; <b>ALSO:</b> Small Multiuser Computer
SMCT	Smart Multi-Circuit Terminal
SMD	Systems Management Directorate
SME	Subject Matter Expert
SMEC	Subject Matter Expert Advisory Committee
SMR	Source, Maintenance and Recoverability
SMRS	Special Mission Radio System
SMSCRC	Standard Multi-User Small Computer Requirements Contract
SMTA	Subordinate Message Transfer Agent
SMU	Switch Multiplexer Unit
SNMP	Small Network Management Protocol
SOF	Special Operations Forces
SOHA	Special Operations & Humanitarian Affairs
SOLE	Society of Logistics Engineers
SOMTE	Soldier, Operator, Maintainer, Tester, and Evaluator
SONET	Synchronous Optical Network

SOP	Standard Operating Procedure
SOR	Statement of Requirements
SORA	Sub-Organizational Registration Authority
SOUTHCOM	Southern Command
SOW	Statement of Work
SPBS-R	Standard Property Book System - Redesign
SPEC	Specifications
SPI	Schedule Performance Index;
	<b>ALSO:</b> Software Process Improvement
SPIRIT	Special Purpose Integrated Remote Intelligence Terminal
SPO	Special Project Officer
SPR	Software Problem Report
SPS	Standard Procurement System
SPT	Support
SR	Senior
SRA	Separate Reporting Activities;
	<b>ALSO:</b> Systems Research & Applications
SRAW	Short Range Antitank Weapon
SRWBR	Short Range Wide Band Radio
S/S	Sole Source
SSAR	Specifications and Standards Acquisition Reform
SSCOM	U.S. Army Soldier Systems Command
SSD	Security Support Division
SSEB	Source Selection Evaluation Board
SSIR	Supply System Inventory Charts
SSL	Software Solutions Laboratory
SSN	Soldier Support Network; <b>ALSO:</b> Social Security Number
SSNIRS	Solid State Near IR Sensors
SSR	Supply Support Request
SSS	Single Shelter Switch
SSTS	Standard Systems Technology Support;
	<b>ALSO:</b> Sustainment Systems Technical Support
SSWG	System Safety Working Group
S&T	Space & Terrestrial
S&TCD	Space & Terrestrial Communications Directorate
STACOMP	Standard Army Management Information System Tactical
STAMIS	Standard Army Management Information System
STEP	Standard Tactical Entry Point
STINFO	Scientific and Technical Information
STO	Science and Technology Objective
STOW	Synthetic Theater of War
STRAT	Stratification
STRICOM	U.S. Army Simulation, Training and Instrumentation Command
SUM	Software Users Manual
SVC	Switched Virtual Circuit
SW	Software
SWA	Southwest Asia
SWEATS	Software Engineering and Technical Services
SYS	System
SYSPAC	System Safety Policy Action Committee
T1	(type of communications line) Standard digital line service; Provides transmission rates of 1.544 Mbps and carries both voice and data



T3	Tri-Band Tactical Terminal
TA	Technical Assessment
TAADS	The Army Authorization Document System
TACFIRE	Tactical Fire
TACMIS	Tactical Management Information Systems
TACMS	Tactical Missile System
TACOM	U.S. Army Tank-Automotive and Armaments Command
TACSTAT	Tactical Satellite
TADS	Target Acquisition and Designation System
TAFIM	Technical Architecture Framework for Information Management
TAR	Technical Acceptance Recommendation
TASC	The Analytic Sciences Corporation
TB	Technical Bulletin
TBD	To Be Determined
TBM	Theater Battle Management; <b>ALSO:</b> Tactical Ballistics Missiles
TC	Type Classification
TC-AIMS II	Transportation Coordinators' Automated Information for Telecommunications
TCCC	Terrestrial Critical Control Circuit
TCCCS	Tactical Command, Control and Communications System
TCF	Technical Control Facility
TCO	Tactical Combat Operations; <b>ALSO:</b> Total Cost of Ownership
TCP	Transmission Control Protocol
TDA	Table of Distribution and Allowances
TDMD	Technical Data Management Division
TDP	Technical Data Package
T&E	Test & Evaluation
TECH	Technical; <b>ALSO:</b> Technology
TECNET	Test & Evaluation Community Network
TECOM	U.S. Army Test and Evaluation Command
TEED	Tactical End-to-End Encryption Device
TEF	Thermoelectric Fan
TEMOD	Test Equipment Modernization
TEMPO	Telecommunications Modernization Project
TES	Tactical Engagement Simulation
TESAR	Tactical Endurance Synthetic Aperture Radar
TEXCOM	Test and Experimentation Command
TF	Task Force
THAAD	Theater High Altitude Area Defense
TI	Technical Insertion; <b>ALSO:</b> Tactical Internet; <b>ALSO:</b> Thermal Imagery
TIC	Technology Integration Center; <b>ALSO:</b> Tactical Internet Center
TID	Target Impact Dispersion
TIGER	Tactical Intelligence Generation and Evaluation Relay
TILO	Technical Industrial Liaison Office
TIREM	Terrain Integrated Rough Earth Model
TITAN	Tactical Internet Test and Analysis
TIWG	Test Integration Working Group
TLOS	Target Location and Observation System
TM	Technical Manual
TMDE	Test, Measurement and Diagnostic Equipment
TMM	Thomson-Thorn Missile Electronics Limited
TMS	Tactical Message Switch
TNCC	TROJAN Network Control Center
TOA	Total Obligation Authority

TOAS	Technology Opportunities Analysis System
TOC	Tactical Operations Center; <b>ALSO:</b> Training Operation Center
TOD	Technical Objective Document
TPRISM	U.S. Army Training and Doctrine Command Plan to Re-Engineer Information System Modernization
TPS	Test Program Sets
TQG	Tactical Quiet Generator
TRADOC	U.S. Army Training and Doctrine Command
TRAPS	Template Review And Analysis For Performance Specifications
TRCS	Tactical Radio Communications System
TRDI	Technical Research and Development Institute
TRI-TAC	Tri-Services Tactical Communications
TRM	Training Resource Model
TROJAN	<b>(Intelligence &amp; Electronic Warfare System)</b>
TROPO	Troposcatter
TS	Top Secret
TSII	Trojan Spirit II
TSACS	Terminal Server Access Control System
TSD	Transmission Systems Directorate
TSF	Tactical Support Facility
TSN	Test Support Network
TSO	Technical Support Office
TSS	Tactical Switched Systems; <b>ALSO:</b> Target Sensing Systems
TST	Tactical Signal Intelligence Technology
TSWG	Technical Support Working Group
TTC	Tropic Test Center
TTP	Tactics, Techniques and Procedures
TWS	Thermal Weapon Sight
TWT	Traveling Wave Tube
TYAD	Tobyhanna Army Depot
U	Umbrella
UAV	Unmanned Aerial Vehicle
UCO	Uncommitted Obligation
UDP	User Datagram Protocol
UFD	User Functional Description
UFR	Unfunded Requirement
UHF	Ultra High Frequency
UGV	Unmanned Ground Vehicle
UIC	Unit Identification Code
ULLS	Unit Level Logistics System
UMS	Universal Modem System
UNIFIL	United Nations Interim Force
UPS	Uninterruptable Power Supply
USAADSCH	U.S. Army Air Defense Artillery School
USACE	U.S. Army Corps of Engineers
USARSO	United States Army South
USASAC	U.S. Army Security Assistance Command
USASC	United States Army Safety Center
USASOC	U.S. Army Special Operations Command
USDA	United States Department of Agriculture
USMA	United States Military Academy
USMC	United States Marine Corps
UTP	Uninterrupted Power Supply

UV	Unmanned Vehicle; <b>ALSO:</b> Ultra Violet
VCO	Value Concepts Office
VCSA	Vice Chief of Staff of the Army
VE	Value Engineering
VECP	Value Engineering Change Proposal
VHF	Very High Frequency
VHFS	Vint Hill Farms Station
VIE	Virtual Integration Exercise
VIS	Vehicular Intercommunication System
VM	Value Management
VMF	Variable Message Format
VMMD	Vehicle Mounted Mine Detector
VMO	Value Management Office
VMP	Value Management Program
VOX	Voice Operated Xmit
VPSB	Virtual Parts Supply Base
VRTA	Vibration Reduction Test Aircraft
VS	Virtual Single
VSAM	Video Surveillance and Monitoring
VTC	Video Telecommunications; <b>ALSO:</b> Video Teleconference
V&V	Validation & Verification
WAN	World Area Network; <b>ALSO:</b> Wide Area Network
WARS	Worldwide Ammunition Reporting System
WBS	Work Breakdown Structure
WFA	Warfighter Associate
WINCASS	Windows Compliance Assessment and Sustainment System
WIN-T	Warfighter Information Network - Terrestrial
WIPT	Working Integrated Product Team
WIT	Wireless Interworking Testbed; <b>ALSO:</b> Warhead Impact Target
WITS	Washington Interagency Telecommunications System
WLAN	Wireless Local Area Network
WO	Warrant Officer
WORCS	Work Order Reporting and Communication Systems
WP	Will Proceed; <b>ALSO:</b> Working Party; <b>ALSO:</b> Westpac
WRAP	Warfighter Rapid Acquisition Program
WS	Workstation; <b>ALSO:</b> Weapon System
WSMR	White Sands Missile Range
WSMS	Warrior Systems Modernization Strategy
WSOLOP	Workstation On-Line Operational Software
WWW	World Wide Web
Y2K	Year 2000
YG	Year Group